

pdp

PRODUCT DEVELOPMENT PROJECT

COURSE GUIDE



**Product Development Project
Course Manual**

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COURSE GUIDE

Hey you and welcome to the legendary Product Development Project!

We promise that this is going to be a learning experience of a life time. In this manual you will find some basic information about the process, tools and workshops held during the course and who to contact in case of needing help. More extended information can be found behind the links. But remember: the best way of getting around DF and making PdP the best experience possible is by talking to people. Here at Design Factory students come first, making you our priority number 1.

Best Regards,

Eetu, Course Staff and all the rest of the ADF crew



***“Welcome to Design Factory
to co-create, to work hard
and to have fun!”***

Eetu

The Course Janitor

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TO DO AND DELIVER

PdP is a course where the students have a lot of freedom and influence in terms of their learnings and processes. There are still few assignments and deliverables that all teams are expected to do and deliver until the end of the course.

These assignments are planned to assist the teamwork, monitor the process and communicate it to the community.

PROJECT PLAN

Project plan sets the base for the project throughout the course.

WHAT?

Each team is required to deliver to teaching team a preliminary project plan in the beginning of the project work. The plan can be updated any time along the process to get best benefit out of it.

The audience of this report:

- Team itself
- Sponsor
- Stakeholders
- Teaching team

WHY?

By following the plan the team will successfully come to an end with the project and track on used time as well as the human and capital resources.

The team should remember that the project plan is not only used by the teaching team to evaluate the project, but more so it should be a tool for the team itself.

Additionally, the project plan is a great way to communicate the process and plans for the sponsor and other stakeholders.

for whom:

The whole team/
assigned people.

PROJECT PLAN 1.2

10.2016

HOW?

Project plan doesn't have a given form so the team can decide what topics are most critical for team. Typically project plan covers at least the following topics:

Project background

Project objectives, expected deliverables

Methods

Organization

Work breakdown structure

Schedule

Budget

Communication plan

Meetings , checks and decision making

Risk analysis

Plan for reporting and transfer of results

Tracking experiences, lessons learned and feedback

WEBSITE INTRODUCTION



AT Skate (2014-15)
We are working on electric offroad skateboard. We hope to get moving ...



BUJOYCAST (2014-15)
We are a team working together with Comnet to create a buoyant, ...



Conn Artists (2014-15)
Modern ships, like cruise vessels or icebreakers, utilize azimuth thrusters instead of ...



Driven11 (2014-15)
We are an international team w Wärttilä project. Our goal is ...

A short introduction of the project to be posted on the course website

for whom:
The whole team/ assigned people.

when:
First version is to be returned in the first CPM. Updated during the year.

WHAT?

Basic content:

- Background and objectives of the project
- Contact information
- A communicative picture

Optional content:

news, survey links, photos, videos, published articles.

WHY?

To communicate the project to parties e.g. the Sponsor organization, Design Factory and Aalto University community, third parties (subcontractors, experts, users) and media.

HOW?

- 1. Select the person in charge.**
- 2. Work out initial story and photo.**
- 3. Send your material to PdP staff.**
- 4. Update your info whenever needed.**



Rüm (2013-14)

2014 kapseli

Rüm combines design and engineering to deliver a human centred solution to temporary accommodation for Kapseli OY. Rüm is designed for airports, transit centres, construction and mining sites.

Be welcomed into a community of Rüm users who relax, connect, play and continue on their journey. Feel safe knowing your nap time goes on uninterrupted. Via our app, see if old friends have checked-in, make new friends or explore your surroundings. Plug in your devices and continue working, or reconnect with family and friends from the privacy of your own customizable space.

Sponsoratör: Kapseli Oy

Final Presentation: Team Rüm 2014

in Media:

- Kapseli on olemassa tulevaisuuden matkailun ja työelämän, Tekniikka & Talous 27.6.2014

- Rüm on uusi näkökulma kapselitalouteen - Järvenpää, Oivaskainen, Uusi Suomi 28.6.2014

- Kapseli eller container är framtidens hotell - Nina Weckström, Hufvudstadsbladet 28.6.2014

- Aalto-yliopiston opiskelijat ovat suunnitelleet kapselitalon - Helsingin Sanomat 28.6.2014

NOTE!

**Be active – it's your project's website.
You can do as many updates and tuning as you wish.**

CHECKPOINT MEETINGS

Checkpoint meetings are the most important contact sessions with the teaching team

for whom:

The whole team/
assigned people.

when:

Throughout the whole
year, once a month.
Starts after the lecture
period.

WHAT?

At the meeting, the team (or few team members) present their current status of the project. In case certain advice is needed or if any problems have occurred, the team together with teaching team finds suitable solutions or ways to go forward.

WHY?

To check out the current state of the project and to make sure that everything goes well.

HOW?

Come always prepared!

Prepare a handout to give to the teaching team. Handout should be about A4 of information about the current progress. If asked, have a small presentation to show the current state of your project.



Task of the 2020s

- Social entrepreneurship
- Social mobility + leading firms
- Regulating + moving jobs

2020s

2020s

TEAM OF THE WEEK

Taking care of the ADF premises for one week and organize the community breakfast on Tuesday.

for whom:
The whole team.

when:
1 team/week,
throughout the whole
year.

WHAT?

For one week your team is going to be in charge of taking little extra special care of our lovely DF premises. This is your team's chance to get to know the whole place in and out, be part of the DF community and make yourself and your team known for the whole DF family.

HOW?

- building the community
- seeing DF from different angle
- opportunity for making your project visible
- user testing

PdP is the the biggest class operating in DF and at some point you will also appreciate the fact that you are able to find the tools and that there is some clean mugs at the kitchen.

When everyone does a little, it keeps us going for a quite long time! Our mothers don't clean here after all!

THE MAIN TASKS:

1. Few team members to **show up everyday latest at 7:30** to check out the building according the instructions. Should take around an hour to fulfill the duties. On Friday the duties might take a bit longer.
2. Organize the DF breakfast on Tuesday. This is a great opportunity to tell about your project and maybe even do some user testing.

NOTE!

This task is brilliant for team building, so all team members should participate!

KAFIS

- Start & empty washing machines first in the morning or late in the evening.
- Remove irrelevant papers and other stuff from the tabletops.
Clean with wet towel when needed.

STAGE

- Check that ADF laptop and projector remote are on the speakers stand.
- Check also that the stand is in the middle of the stage.

SPACES OVERALL

- Bring ADF mugs to washing machine.
- Clean whiteboards. In case of permanent markings, report ADF staff.
- Collect trash, irrelevant items and papers to trash bins.
- Collect lost property to Cloakrooms Lost & Found section. Bring valuable items to staff wing or to the Lobby Shifter.
- Check and clean the Main Entrance loading dock (remove garbage, cans, bottles, cigarette butts, and other items)
- After office hours: switch off lights, close windows, and release any blocked doors. During winter make sure that snow and ice don't block the doors.
- Safety comes first! Advicse others kindly, if you notice risky behavior.

PROTOBUNKER

- Check and sort out the tools by the color every day. On Fridays report broken or missing tools to Machine shop staff.
- Fix disorder in Supply Cave.
- Remove trashes and sawdust from tabletops.
- If "work under construction" has no sign of owner, please leave a kind note!
- Empty full trash bins & other big trash items to the orange energy waste container outdoor on Fridays.

WOOD SHOP

- Remove trashes and sawdust from tabletops.
- On Fridays: empty full trash bins.
- Check and sort out the tools by he color every day. On Fridays report broken or missing tools to Machine shop staff.

PAINT SHOP

- Empty full trash bins
- Remove old table cover papers and replace with new on Fridays.
- If drying paintwork has no sign of owner, please leave a kind note!

Breakfast at DFfany's @ Kafis every Tuesday at 8.30-10.00am

It takes about an hour to prepare the breakfast when three (3) people are cooking, so if you plan something special make sure to have sufficient time. You can spend the breakfast time promoting your project or making user research, but please remember that people also like to enjoy their breakfast while talking with each other, so there is really no need for presentations.

Typical spending cost is around 65 Euro for 30 people, but if there is PdP or IDBM lectures or events on the same morning, you might have more. When you are expecting more than 30 people for the breakfast, prepare 25% more.

Use your common sense while shopping. E.g. if the tomatoes are horribly expensive, you may get something else instead. Remember to take advantage of what is already available in Kafis and in the Catering room and spend wisely as you must aim to sell as much as you spend.

Friday

- Send a picture/text that can be used to promote the breakfast on the Design Factory Facebook-site.

Monday

- Get the money and example grocerylist from the Lobby.
- Check if there are some groceries from last week in the Catering room, which you could use. Remember that you can also use the flour, sugar etc. from Kafis.
- Buy the groceries. Use the shopping bags with wheels, which can be found from the catering room.
- You may also put the dishwasher on, so that there will be plates and glasses for the next morning.

Tuesday

- Come around 7.30am, breakfast should be ready by 8.30am. Place the Coffee Tag next to the coffee machine.
- Use the "Breakfast at Tiffany's" tin box to collect the 2,50 euros payments.
- Clean up and empty the dishwasher after the breakfast.
- Count how much money the breakfast gathered (write in post-it in the money box) and return the breakfast money to the Lobby.





Example groceries circa 65€

- 3 cucumbers**
- 15 tomatoes**
- 2 lettuce bundles**
- 4 apples***
- 4 oranges***
- 6 bananas***
- 1 pkt dark grapes***
- 2 x 15 eggs**
- 2L UHT milk**
- 1L flavored yoghurt**
- 3 bags pre-baked rolls**
- 4 bags Rye bread
(Reissumies)**
- 500 gr digestive biscuits**
- 1 pkg corn flakes cereal****
- 1 kg Raspberry jam****
- 6L Rainbow juice (3 orange,
3apple)**
- 1x 400 gr Butter/Margarine**
- 2x 400 gr X-tra edam
cheese slices**
- 2 x 300 gr boiled ham**
- Salami ****

* You can also choose other fruits

** There is usually a package of porridge, salami, jam and cereal in the DF breakfast boxes in the catering room

FINAL REPORT

By reading the report one should get an overview of the project process and detailed description of the final prototype.

for whom:
The whole team.

when:
1 week before the Gala

WHAT?

There is no given form or guideline for the final report. What we usually highlight is that you should **include all the topics that the sponsor would like you to have in your report.**

You should write one detailed report for the whole team. Individual reports are not needed. Usually topics that are introduced in the report are the team, sponsor, brief, design and product development process, final design and prototype. Project report has to be delivered to the teaching team and the sponsor at the end of the project.

WHY?

The final report is mainly targeted to the sponsoring company. By reading the report the sponsor should get an overview of the process and detailed description of the final prototype.

Additionally, the teaching team will use the final report for evaluation of the project. Mainly the project can only affect grading positively since the teams always have done certain things that the teaching team is not aware of. These phases should be visible in the report.



HOW?

The report should be done in a professional way just like if you would be doing a project in company that you are working for. Project outcomes are public but the report is for the sponsoring company only and it can include confidential material. If you wonder what should and shouldn't be included in the report, agree with the sponsor about the content well ahead.

To get an idea about the project reports you can come to see few examples from the last years in the PdP room.

DEADLINE?

Final report is due one week before the Gala, so it can be reviewed and included in the course evaluation.



WORKSHOPS

Workshops are held during the PdP on various topics. As some of them are meant for only one or two team members, workshops like PD6 brings the whole team working together.

Workshops are generally intensive, high in content and value. The DF staff also has few other workshop tools in their back pockets so don't be afraid to ask!



PD6

WHAT?

The team will participate on one of the PD6 workshop days **together with their sponsor**. The whole team is expected to attend including the remote members.

In this facilitated workshop the team will go through the whole product development process, and jump-start their upcoming project. PD6 works as an idea generation tool, where the ideas are evaluated at the same time.

Signing up will be done in Doodle, link shall be sent to the PMs.

WHY?

Fail faster, succeed sooner!

PD6 boosts the starting phase of a project by enhancing the communication of a team and clarifying the task ahead. It underlines the value of making ideas tangible and provides tools for generating, executing and testing ideas in a quick n' dirty manner.

PD6 also encourages (or forces) the teams to reach out and ask for help by emphasizing the involvement of different stakeholders in the design process. Oh, and it is just so much fun!

PD6 is a product development process condensed in six hours.

for whom:

The whole team and the sponsors

when:

On 1 day in October.



PERFORMANCE TRAINING

WHAT?

Set of training sessions by professional trainer and actress. The training also covers advanced details, e.g. using microphones and performing in spot lights.

WHY?

It is commonly agreed that capability for fluent, impressive, clear and well organized presentations, pitches or introductions of new ideas is highly appreciated by employers and modern working life. However, the higher education process often includes no professional training for this.

TEACHER



Elina Aalto

Elina Aalto is a Helsinki-based actress training improvisations and performance skills. She has graduated from the Finnish Theatre Academy in 2009 and has been performing skills at Design Factory over ten years.

Her workshops will include multiple topics from understanding body language, improving presentation skills and how to use one's voice.

Learn to present and pitch your projects.

for whom:

Students who are interested in rehearsing their presentation skills. Most obvious participants are those students, who will be on stage at the Final Presentations.

when:

Sessions will start in the beginning of November.

ECONOMY TRAINING

***Economy
Officer is in
charge of
taking care of
the financial
matters and
billing.***

for whom:
The whole team.

when:
1 week before the Gala

WHAT?

Each team is required to nominate an economy officer that takes care of the financials and budget of the team during the project.

This person doesn't have to be a business student but somebody that is sharp and excited about handling the money. Economy officer should always be on top of the remaining budget, claim back the used money or take care of the billing invoices.

WHY?

Each team has a budget of 10'000€ from which 2500€ can be used for the travelling if necessary. The team is responsible for all the necessary acquisitions.

Optimally personal money shouldn't be used since many stores can invoice PdP project electronically or by invoice. However, sometimes it is easier to make purchases by own money and claim those back afterwards.

Since university has lots of regulations about what can be acquired or not, it is important that the Economy Officer is on top of these rules to avoid any complications.



HOW?

Nominated Economy officers has to be informed to teaching team straight after the team formation. All the officers have to provide following information for the teaching team to gain access for the required software.

It is recommended that the Economy officer can speak Finnish.

Provide by e-mail:

Name

Date of birth & Personal ID code (if you have a Finnish one)

Home address in country of permanent residence

Female/Male

Email

Mobile phone number

Home country

Nationality

Send by SMS/Whatsapp:

Name of bank

IBAN Bank account number

SWIFT/BIC code

Why send in two different ways, you may wonder.

For your security, that is, young padawan.

Yes, hmmm...



SAFETY TRAINING

*Safety comes
first, second
and third!!!!*

WHAT?

Selected officer will take part in safety training, learn safety issues, house rules etc. After training, safety officer is responsible for teaching the rest of the team.

WHY?

To avoid casualties, keeping people safe and alive. In Design Factory we have large many different kinds of machines and equipment, which require sufficient knowledge in safety issues.

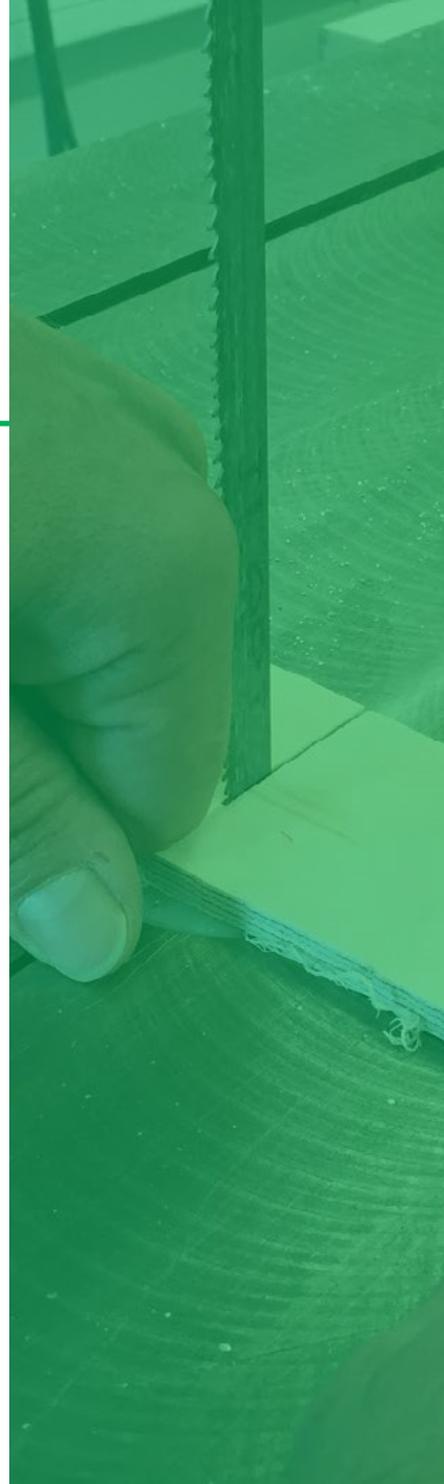
for whom:

The selected Safety Officer.

when:

In October.

Students are not allowed to work with machines before safety training.





ELECTRONICS CRASHCOURSE

WHAT?

This is a very basic electronics course, focusing on fundamentals of microcontrollers and on basic components such as LEDs, buttons etc.

Goal is to get familiar with components, and working methods. Participants will be divided in to small groups and will manufacture a simple game using the basic components.

***Basics of
electronics
learnt in a fun
and fast way!***

for whom:

People interested in working with electronics and have no background in it.

when:

During the Fall semester.

I LIKE, I WISH

FACILITATED FEEDBACK SESSION

Giving constructive feedback and improving the team

WHAT?

I like I wish is a facilitated team feedback activity where team members of a team, engaged in a creative project, get to provide and receive both positive and constructive feedback in written as well as in spoken format.

Sessions are processed in a safe and systematic way. The format was developed by Satu Rekonen through dozens of sessions organized since 2011 on several different interdisciplinary courses taking place mainly in Aalto Design Factory.

WHY?

Team members should have the ability to provide feedback to each others. Without feedback people might not know whether they are doing things right or doing the right things. The risk is that the team's behaviour starts to build on assumptions. If assumptions are never spoken aloud, efforts may be focused and energy spent on things that never existed in the first place.

Remember that the whole team should be participating the session as a whole so it would be beneficial.

for whom:

PdP teams or any teams for that matter.





PROJECT MANAGER

PdP course has about 200 students working in over 15 project teams annually. As team size can expand to even 14 members and several locations, management is necessary.

Project Managers are the key players in communication between the course staff and the teams. As the role brings great possibilities and learning, it also comes with great responsibility. Thus Project Managers are given training to equip them with knowledge and skills to handle the tasks.

PROJECT MANAGER SYSTEM

Each PdP team must have a project manager - we could also say a project leader.

for whom:

Project Managers are selected during the first lectures.

when:

PM's role lasts for the whole year.

WHAT?

The manager is the key contact person on behalf of the team. Project Manager supports the team in organizing the necessary phases of planning, execution, reporting and communicating as well as possible. PM helps the team and the team should help the PM.

At PdP we are open and flexible for creative and functional arrangements, e.g. having Vice Manager or another student's sharing managerial and leadership responsibilities. However, as long as otherwise agreed, in every team it's the PM to whom any urgent requests and notices will be addressed.

WHY?

The course is big, and so are the teams. It's very important that the work is well organized, and how to do that, is one of the learning objectives.

Even the managerial tasks are not always simple and unambiguous, and leading the team and process multiplies the complexity.

The PM usually has a role in helping the team members to become a Team - but only with the help and commitment of the other team members.

PROJECT MANAGER TRAINING

WHAT?

After the training, the PM's should be aware what kind of issues and problems might occur during the project work and what should be done in order to survive.

We want to make sure that they get all the possible help and at least know who to ask, when they need help. Also we want to provide an option for the managers to discuss with the fellow PM's so they can learn from each other and reflect their common experiences about the project work. PM's gain 2 extra credits for acting as a manager for the project.

HOW?

Project Manager training is organized once in Autumn and once in Spring and both sessions are strictly mandatory in order to be PM. The training usually takes place on Saturdays.

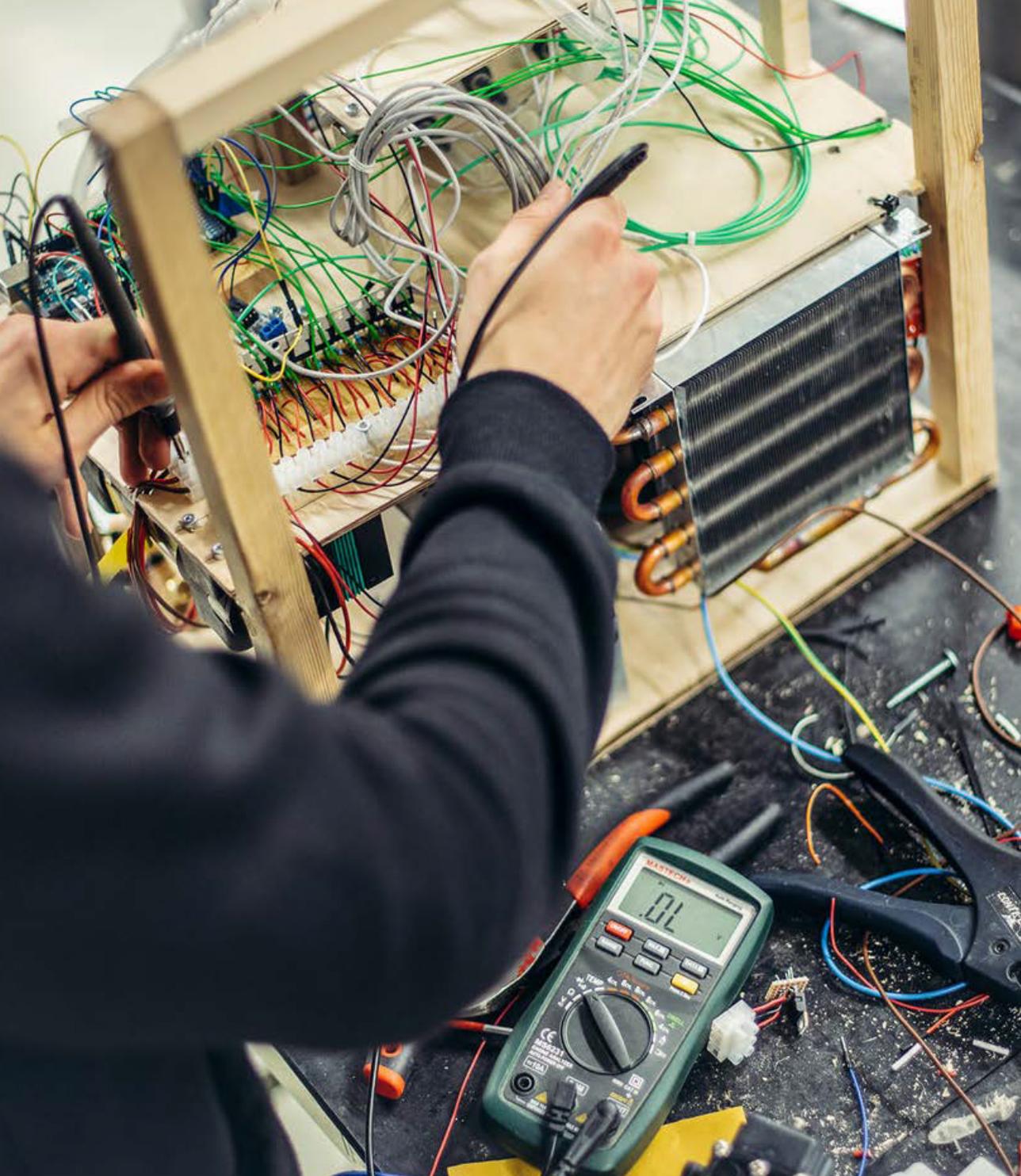
The Autumn session concentrates on starting the projects and making a plan to successfully pass this 9 month experience.

The Spring session concentrates on reflecting the project process so far. Additionally we start to plan what should be done in order to get everything ready for the Gala.

PM's are given training to equip them with knowledge and skills to handle the tasks

for whom:

Committed and slightly crazy individuals.



PROCESS AND TOOLS

PdP course is like running a marathon through jungle. It needs both work and time and you won't survive through it without having processes and tools.

As the course book on the PdP course we use the “Product Design and Development” - by Karl Ulrich and Steven Eppinger. In the following section we introduce some of the topics more thoroughly elaborated in the course book and go through some course practicalities.

TEAM FORMATION

“It is known that the teams with great chemistry make working easier.”

for whom:

All the PdP students must find a team or they can't participate the course

when:

The first three lectures. That's why presence during them is highly recommended.

WHAT?

In PdP the project work is done in interdisciplinary teams. Normally the team size is between 10-14, including the remote members. The teams are formed during the first three lectures.

Each team must include at least one:

- Manager
- Business enthusiast
- Design Manager

Additionally, team should include both Finnish as well as non-Finnish members. Therefore, e.g. fully Finnish /non-Finnish team are forbidden.

WHY?

It is known that the teams with great chemistry make working easier. Here are few tips that makes finding the right team easier:

1. Try to finding people that you feel easy to talk and spend time with.
2. Try to look people with shared interests such as projects you would like to apply as well as
3. Share also about things you do on your spare time. Shared interests will make your team forming lot easier.



HOW?

First step is to find right amount of people. As there are approx. 200 students on the course and limited amount of time, **it's important to follow the instructions.**

During the first lectures you'll be given time to talk to the other course participants. As you meet people, tell your name, major etc. try to keep meetings short. When you have met bunch of people, start slowly forming the team.

When you have reached the right amount of participants and team leader, team building can start. It's very important to get to know each other. Use ADF spaces. Spend time together, play games, make food, whatever makes your teamwork easier in the future.

MEETINGS

Team meetings are the family gettogether, time to work and have fun!

for whom:

You, me and the pizza delivery guy

when:

Monday, Tuesday, Wednesday...you get the drill. Meet whenever and however. Just make sure that you do!

WHAT?

Each team organizes and plans their meeting routines in away that are best suitable for them. When establishing best suitable meeting methods certain things should be considered:

- how the meeting time is used efficiently
- planning, execution and afterwork
- who makes the agenda for the meeting
- how are the decisions made
- how is the afterlife tracked aka. when are the plans taken forward.

Use the DF spaces to your benefit: we have rooms suitable for various kind of meetings and activities. Be creative and don't get stuck in one form of arranging the team meetings: have a pool n' prototyping night or go bowling!



TRACKING HOURS

Time tracking is a must!

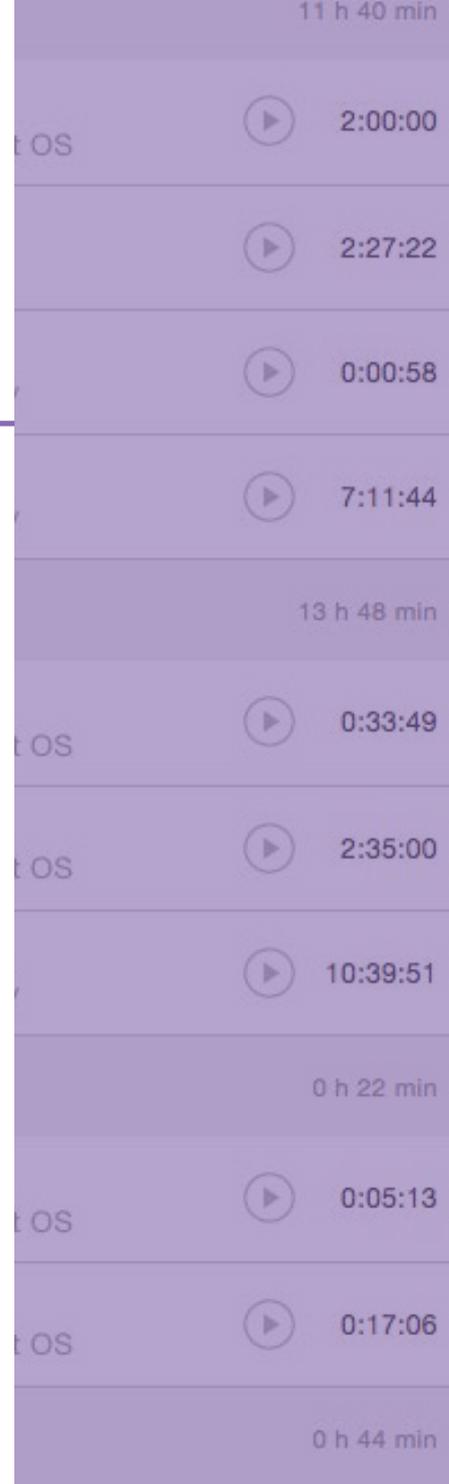
for whom:
The whole team

tools:
Example tools like Excel, Google Drive, Toggl. Try out different ones and find one that works for your team.

WHAT?

Tracking hours is just for yourself. We are not asking how much is your input or have you been using enough of your time. Tracking will help planning tasks, to motivate the team and in the future it will help understanding the next projects.

Tip: Don't only mark the total time used but also mark on what task you were doing. It gives your team better understanding of the time spent and helps to plan future actions.





TEAM RULES

WHAT?

In the beginning of the course it is very important to create team rules which all members will follow. Rules such as how we will communicate, when we will have meetings, who will participate etc. What will happen with unbalanced workload or if someone is freeriding? Will there be punishments or any consequences?

Openness and these rules will make working easier. When there are clear rules, it is much easier to avoid misunderstandings.

Having common rules and roles makes the daily project life much easier and smoother.

for whom:

The whole team together. Make sure all the members are following the rules!

IDEA GENERATION

Idea generation doesn't know the word no - all ideas are good ideas!

for whom:

The whole team should participate in all stages of the process.

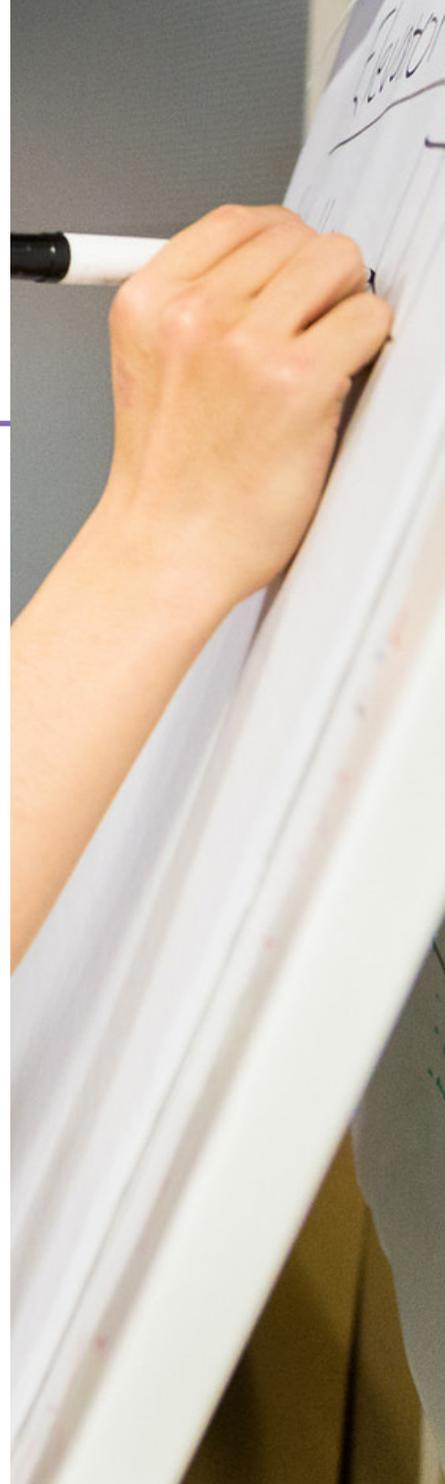
when:

Ideation is never over!

WHAT?

There are no simple answers to this topic. Generating ideas can be very creative or it can follow strict structures. There are no rules, just keep in mind, that in the beginning **it is better not to judge ideas even if they sound crazy.**

Although different variations of brainstorming can be very useful, sometimes ideas come to our mind while sleeping, playing games or doing something else that doesn't involve any connections to the problem we are trying to solve. Individual work or dividing team to smaller subteams can create more ideas. Just remember to make notes and share your stuff.





PROTOTYPING

WHAT?

Prototyping is a very important part of the project. Whether you are working with apps, designing mechanical stuff or inventing new services, prototyping will make working easier.

There are many ways to use prototypes and we are not always talking about working prototypes. These badboys can be used just to show the shape or size. You can use multiple prototypes to show functionality or just one having almost fully working product. The sooner you start, the easier it will get. And remember we have awesome staff who will be very happy to help in building or coaching with prototyping tasks.

*Build to think,
don't think to
build!*

for whom:

The whole team should participate in all stages of the process

when:

Start as early as possible!!!

A hand is shown writing on a business model canvas. The canvas is covered with various sticky notes, some of which have handwritten text and a bicycle icon. The background is a purple gradient.

BUSINESS CASE

It is always important to consider the business aspect when developing a product.

WHAT?

Of course it is highly dependable about the client project which business aspects should be considered. Make sure that you discuss with your sponsor about the business behind the product that you are developing so you know what should be research to develop a business model.

Business model canvas is a great way to map out different stakeholders, customers and resources. It's a good tool to be used already in the early phases of the project. Some of the the segments are often very obvious but especially the ones that need a bit more thought should be fulfilled carefully.

Additionally when project scope is defined and first ideas about the prototype and the target market occur, a desktop-style market research is recommended to be done to get a bit more precise idea about the size of the potential market, profit model and possible competitors.

A photograph of a person working on a bicycle in a workshop, overlaid with a purple gradient. The person is focused on the task, and the background shows various tools and equipment.

UX METHODS

WHAT?

Working in PdP course should not be just attending the lectures and doing paper work. Search for inspiration, travel, meet people and test. Anything that you feel will help your project and learn new stuff. Lot of learning have to be done by yourself so remember when working in Design Factory you are surrounded by talented people with awesome skills. Fast way to learn is to ask these guys to show/teach what you are looking for.

- ask, watch, try, learn
- take your phone and call
- go to places
- test your tests

Finding the real users and understanding their needs, even the hidden ones, is product developers most important task!

for whom:

The whole team should participate in all stages of the process.

when:

Start as early as possible!!!

TESTING

Always is a good time to test!

WHAT?

Test your idea, test your prototype, test your product. It is always good time to test. Testing is the only way to know whether idea/prototype/product is working.

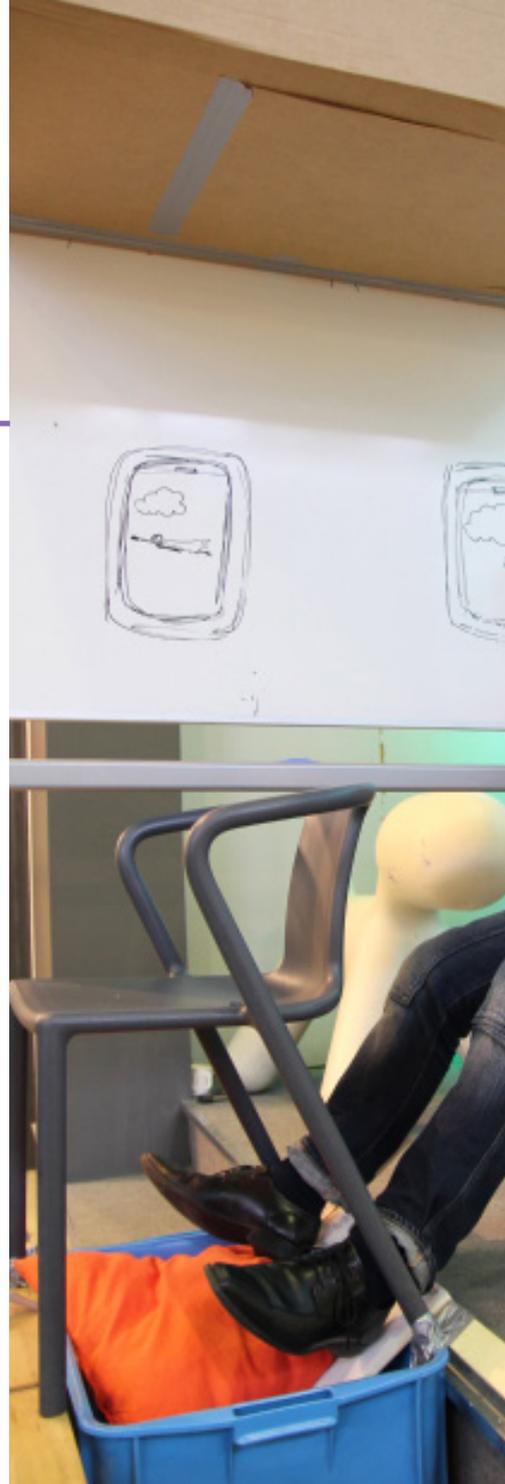
Testing can be made in various ways depending on what you are testing. Use polls, use Design Factory staff/students and our premises. Just remember to make notes and utilize the results.

what:

Everything!

when:

Start as early as possible!!!





INTELLECTUAL PROPERTY RIGHTS

WHAT?

PdP course strongly encourage students to invent new stuff. However these projects are made for sponsor companies and for that reason new inventions belong to these corporations. Even though patents will be owned by the sponsors, the inventors will get their names into the patent documents. In addition, the inventors shall receive the financial reward accordingly to the sponsor company's IPR policy.

In the beginning of the course every single student will sign an assignment of rights, that will contain information mentioned before.

Almost every year some inventions and new patent cases are filed. Because paperwork takes time, **patent application process must be started not later than the end of March.**

Are you an innovator?

when:

Latest in March. The application process should be up and running before the PdP Gala as the project will then be presented to the public.

PURCHASING AND BUDGET

The budget is meant to be used for prototyping and testing costs.

for whom:

Budget and purchasing doesn't have to be managed by the same people

when:

Start the course by creating a budget draft and clarify it during the year. Make sure that you do a budget plan!

WHAT?

In total, each team has 10'000€ and is required to take care of their own accounting. This means that the Economy Officer of the team should be always able to answer how much money has been used and for which purposes.

The budget is meant to be used for prototyping and testing costs. When you are about to order building materials, electronics or so, please consult the teaching team first so we can see which would be the easiest way to get the orders done.

Primarily no own money should be used but if so, the Economy Officers can claim back the money by using M2 travel claims program. Original receipts have to be delivered to the PdP office in order to get refund.

RULES

In PdP, students get to deal with real money, therefore here are a few ground rules all teams **MUST** follow:

- 1. The budget is 10.000€ in total.**
- 2. 2500€ max. can be used for travelling costs.**
- 3. Buying something that costs more than 200€, consult the teaching team first.**
- 4. When travelling, the students can claim travel allowance which is 18.45€ per day. This money should cover all the costs meaning transportation, meals and etc. These costs cannot be claimed back separately.**
- 5. Alcohol, tobacco and drugs cannot naturally be purchased.**
- 6. The budget can't be used on teams own fun activity. Consult teaching team for any special occasion, for instance, if there is a very particular reason to show hospitality for participants of user testing or to an external party.**



SPACE RESERVATIONS

CAPACITY

20 people seated

AUDIO, VIDEO & IT

1x Projector (HDMI + VGA inputs)

1x Audio input (3.5mm plug)

FURNITURE

2x Whiteboards

Remember to reserve the spaces well before hand!

WHAT?

When you need a space at Design Factory for your team meetings, experiments, bigger user testing events or something completely different, you have following options:

1. Reserve bigger spaces online.

Make sure you got a confirmation in your e-mail about the reservation. Spaces that are reserved online are Studio, Stage, Engine Room and Audition. The space reservations requests are answered only few times a week, so book well before hand. The reservation are done at *designfactory.aalto.fi*

2. Reserve smaller spaces on site.

Rooms like Birch, Brainstorm and Puuhamaa are reserved from the pads next to the door. Remember to check in when you start your session.

3. Occupy non-reservable spaces at DF.

There are plenty spaces at DF that you can just use, e.g in the Lobby and Kafis. First come - first serve.

for whom:

Don't assume this is the PM's job; rotate who's turn is it to reserve the space needed.

when:

Remember to book a space well-advanced, preferably at least a week before the event.



EQUIPMENT LOAN

WHAT?

During your project you might want to document an experiment or produce a killer final multimedia extravaganza. This is why Design Factory has lots of different media production equipments. Whether you need camera (still or video), mic, tripod or cables, Lobby Desk is the place to go: talk to the Shifter of the Day and follow the following.

How to loan equipment:

1. Have good reason why you need a camera etc.
2. Consult current Lobby shifter between lobby hours (9-16).
3. Return all the equipment on time. All equipments have maximum loan period and have to be returned personally by the person who is responsible.

*Cameras,
tripods,
GoPros,
microphones,
etc.*

when:

especially during the Spring the loanable equipments are reserved a lot, so schedule your project taking that into consideration.

KENNO

The Buzzing Spot of Suurpelto

Discover the refurbished, refurbished, and redesigned community and meeting space of the future.

Daily life show gathering people together and future the identity of the area
Designed with elementary school children

A Monumental Art Piece

Designed with elementary school children

Tailored interior by Iku
Aesthetic, functional, and modular furniture

Smart lock system by Rollock
Easy access and management through smartphones
Finnish innovation excellence



GALA PREPARATION

The Product Design Gala in May is the grand finale of the PdP year. In the Gala, project teams get to showcase their hard work to the sponsors, media and to the bigger public. Gala is divided into two days: the Presentation and Exhibition day. On the Presentation day all the teams present their work on the spotlights. Exhibition day brings over a thousand interested visitors to explore the project stands and demos.

HALFWAY SHOW

Halfway Show kicks off the second half of the PdP adventure

WHAT?

We kick-off the second half of the PdP year with the Halfway Show where all the teams present their current state of the project. You don't have to have a ready concept to be presented.

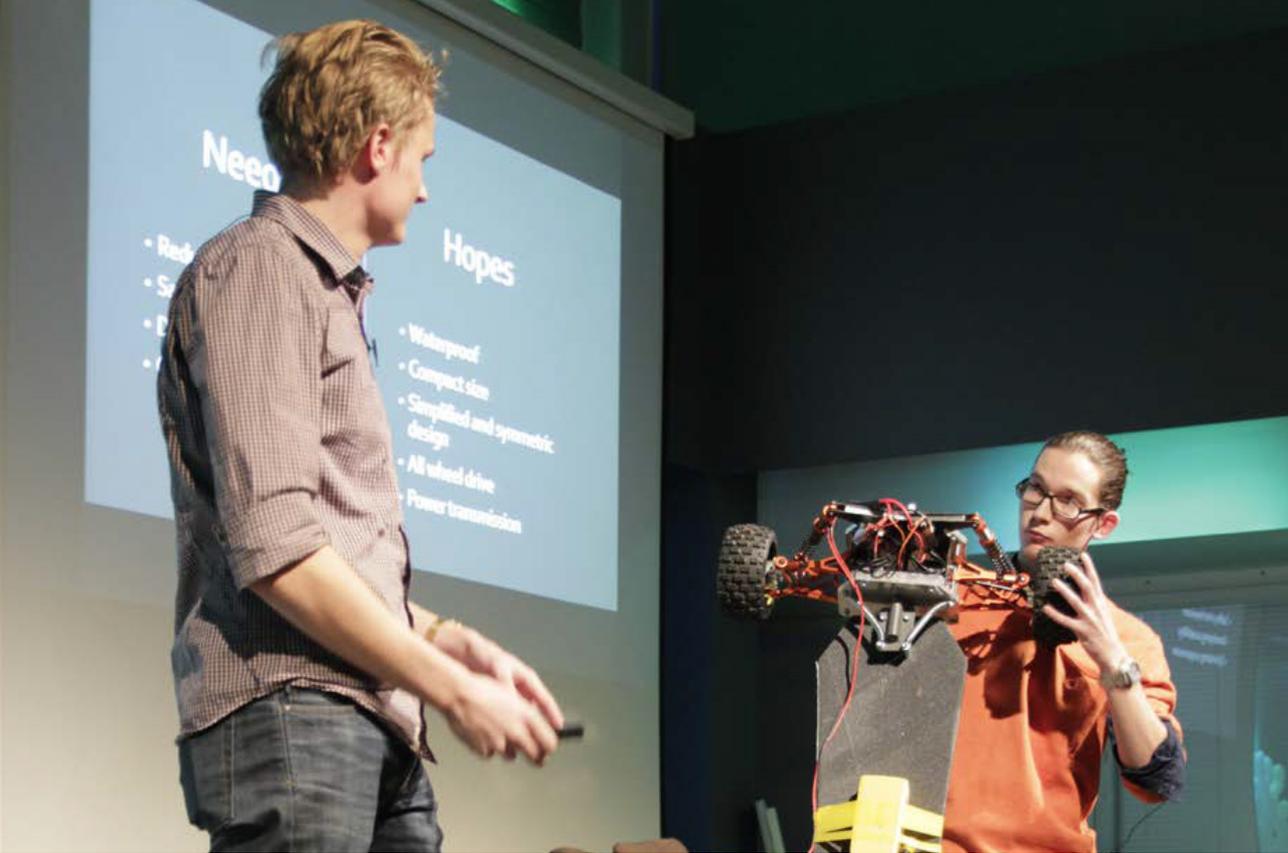
The audience is your fellow PdP'ers so it is more important that you can communicate what has happened over autumn, where you are now and what is about to happen next.

HOW?

- Prepare a 10min presentation where max. 2 persons can be speaking on the stage.
- Remember that you have to hand out your slide deck during the rehearsals held few days prior to show.
- In case you need extra gear like smoke machines, lasers or pyrotechnics please consult AV Gurus of ADF.

when:

In the beginning of the Spring semester.



WHY?

Halfway Show is arranged for You, fellow students and DF staff. By seeing the presentations of the other teams you get a good idea where everybody is going at that moment and the community knows what and how you are doing.

GALA BROCHURE

Gala brochure communicates the final outcome of the project teams

when:

Before the end of March.

WHAT?

Gala brochure is designed to promote the final gala for friends, companies, media and other super cool people. Hundreds of flyers will be pressed to be spread around. Design and printing will be done by DF designer but certain materials are asked to be delivered by each team by given deadline.

WHY?

The flyer will be handed out before and during the Exhibition for promotional purposes. By checking the flyer the reader should get a good overview about the projects and final prototypes/outcomes that the teams have done over the year.

HOW?

- **Deliver a project description of 90-100 words.**
- **A good quality rectangular picture.** The picture should describe the project in the most meaningful way.

Examples of past years flyers can be seen in the PdP room upon request. Also, few examples are shown on PdP website.



A0 POSTER

WHAT?

Every PdP team will make a poster about their project. The poster can be printed in a printhouse (recommended) or at the PrintShop at Design Factory. The frames for the posters you will get from Design Factory staff!

- 1. Design a portrait A0.** Minimum required content is to have
 - a. A explanatory picture
 - b. Sponsor logo, Aalto logo and Partner Uni logo
 - c. Short punch line what your project was about

2. Bring your poster files in PDF format on a USB stick.

3. Be present at the printing day: It will make everything faster and smoother if the person who made the files is there to make possible changes immediately as based on the previous experiences, there are usually some minor things to be changed or corrected.

4. Finalisation: cut the poster to fit the A0 frame. Add the trim marks to your poster when saving your file as .pdf, it will make your life easier. No need for bleeds. The frame will cover the edges anyway so no need to get all fancy with bleeds.

The A0 sized poster should communicate the key facts and the general feel of your project.

when:

One week before the Gala!

FINAL PRESENTATION

*Final
Presentation
is THE
MOMENT of
the year. It's
your moment
to be in the
spotlight to
show case the
years work!*

for whom:

It doesn't have to be the Project Manager on the spotlight.

Presenters should have participated in the Performance Training.

WHAT?

- **10 minute presentation about your project.**
- **Max. 2 persons can be speaking on the stage**

The Final Presentation is your chance to share your PdP story to the sponsor, course staff, rest of the course members, the ADF community and the world! All the teams are expected to present their final concept in a professional and engaging way.

Presentations will be held in Stage, where we have multiple screens to present slides, music, videos etc. Think about the story of your project: what supportive medias will communicate the journey and the final outcome best!



EXHIBITION DAY

Exhibition day is the grand finale of the year, where the projects are introduced to the bigger audience.

WHAT?

During the PdP Gala we organize an exhibition day where each team is presenting their project results. The exhibition area covers Design Factory including front and backyard as well as the Urban Mill.

Exhibition stands should be built well prior to Gala. The last week before the gala day, the whole Design Factory will be reserved for the building.

WHY?

Over 1000 people visit the gala each year. Most of them are University personnel, students and company representatives from Finland and abroad. Also media (tv, radio, magazines) is invited so of course you want to have an awesome and visual stand to promote your project.

The day is yours. It's the highlight of the whole PdP year, so we want to make it as spectacular as possible.

when:

Before the end of May



HOW?

Start thinking about your stand well before hand!

Remember that the stands should be awesome but budget should be used within clever measures.

Materials:

All the materials and tools in Design Factory can be used for building stands. Start to think well in advance (at least a month) what kind of building materials you need (plywood, carpets, frames etc.). Most of the building material has to be ordered from the stores like Stark, K-rauta etc. and it is in your responsibility that you get that gear on time. It is also recommended that you join up the forces with the other teams to make mass orders to be delivered at the same time.

Audio Visual:

Certain AV-gear like screens, projectors and computers, can be borrowed from DF. A separate form will be shared with teams so that equipment can be requested.

After the Gala Day:

After the Gala day teams have to dismantle the stand so there is no direct danger for people hovering around the stand. **The final take down has to happen within one week after the gala** unless other arrangements have been done with DF staff.

WIRE CUTTERS

LANKAKÄSITIT

CARPENTERS PINCERS

PÄÄTYLEIKKURIT

WÜRSTH-SCHNITZ

WÜRST-SAKS

BOX CUTTERS

KATKOTERÄVEITSET

KNIVES

PUUKOT

HEX KEYS

KUUSIOKOLOAVA

GALA AFTERLIFE

WHAT?

You have been working so much to get to this point. Projects have been introduced to the rest of the world but we still have something to do. Probably your team have been using stuff to build and decorate your exhibition stand and now it should be cleaned.

1. Bring back the stuff you have loaned (cables, lamps, tv's etc.).
2. Take down posters, ads, banners; whatever you have used.
3. Finally check your financials. If there are still some invoices left, now is the final date to solve these.
4. Join the feedback session in the end of May/early June to discuss about the course.
5. Agree with your sponsor company about the handover of the work done: what will happen to the prototypes etc.

*There is life
after gala day!*

**whom and
when:**

PdP doesn't end
until all the mess
has been sorted.
No one escapes!



HELP!

“The Design Factory help means everything from support for choosing the right materials, building your prototype, to helping to solve communications problems in your team, and to connecting you with the right people.”

Aalto Design Factory Annual Publication 2014-2015

ADF premises are primarily designed to be the optimal environment for product development. In the Shops you can find specific tools and professional help in all the stages of your project. There are some ground rules to learn in order to make life smooth and nice for all the people in the house.

MACHINE SHOP

Help in all the stages of the process. Always go talk to these guys sooner than later!

WHAT?

Helps to manufacture different kinds of prototypes and to make ideas tangible. Whether there is a need for help in using simple hand tools or high precision CNC-machining, MachineShop staff are there for you.

What is MachineShop made of?

- Awesome people
- 4-axis CNC-mill.
- CNC-lathe.
- Manual mill and lathe.
- Hot work area, including tools for welding and cutting metal etc.
- Great variety of hand tools.
- Small supply of prototyping materials, such as steel, aluminium and plastics.
- Small supply of chemicals, glues, nuts and bolts, etc.

If something can't be made in Design Factory, other solutions will be found from other Aalto facilities or industry.

read more:
[designfactory.aalto.fi/
help/machineshop](https://designfactory.aalto.fi/help/machineshop)



HOW?

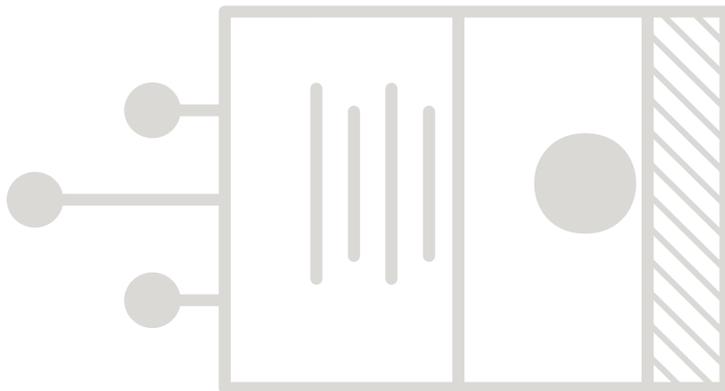
- **The machines and tools are not to be used without presence of MachineShop staff members.**
- Tools are not to be used outside the MachineShop.
- Consumer products such as screws, glues, tape etc. are for use and can be used by students.
- If something is missing, you need help with the tools or some products are out of stock please notify MachineShop staff

ELECTRO SHOP

*Resistors,
LEDs and
circuit boards.
All you need
and more in
electronics
and robotics.*

WHAT?

If you are up to task that requires working with electronics, Electroshop is the place to be! Electroshop staff can help you plan a timeline for your electronics, you can get familiarized with our equipment and get to know our capabilities. And if you are interested in learning any particular software for your project tell us so we can arrange a workshop.



read more:
[designfactory.aalto.fi/
help/electroshop](https://designfactory.aalto.fi/help/electroshop)

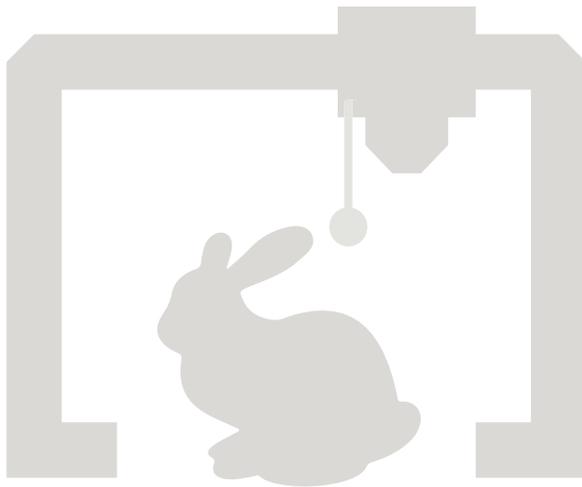


PRINT SHOP

WHAT?

Whenever you need to make a sticker for your prototype or print your project poster, PrintShop is the place to do it. We have also have few rapid prototyping machines (3D printer) to be used to quickly iterate on ideas.

*3D prints,
vinyls and
posters.*



read more:
[designfactory.aalto.fi/
help/printshop](https://designfactory.aalto.fi/help/printshop)

OTHER HELP AVAILABLE AT DESIGN FACTORY

*Design
Factory is
packed with
awesome
people with
awesome
talent. Don't
be afraid to
ask for help!*

RESEARCHERS

We are happy to help to plan and coach you on understanding your users (interviews, observation, user testing, you name it), creativity and ideation, teamwork, design and development methods, and the overall process. There is a bunch of us from different disciplines doing research on these issues willing and able to share our knowledge. If we don't know about something, we can guide you to people who do.

-Miko and the other ADF researchers

DFGN

Design Factories can be found in universities around the world.

Design Factory Global Network is a community of same minded people. To contact these other Design Factories talk to network coordinators whose contact information can be found from designfactory.aalto.fi

read more:
dfgn.org



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