

IDE Master Graduation

Project team, Procedural checks and personal Project brief

This document contains the agreements made between student and supervisory team about the student's IDE Master Graduation Project. This document can also include the involvement of an external organisation, however, it does not cover any legal employment relationship that the student and the client (might) agree upon. Next to that, this document facilitates the required procedural checks. In this document:

The student defines the team, what he/she is going to do/deliver and how that will come about.

SSC E&SA (Shared Service Center, Education & Student Affairs) reports on the student's registration and study progress.

IDE's Board of Examiners confirms if the student is allowed to start the Graduation Project.

! USE ADOBE ACROBAT READER TO OPEN, EDIT AND SAVE THIS DOCUMENT

Download again and reopen in case you tried other software, such as Preview (Mac) or a webbrowser.

STUDENT DATA & MASTER PROGRAMME

Save this form according the format "IDE Master Graduation Project Brief_familyname_firstname_studentnumber_dd-mm-yyyy".

Complete all blue parts of the form and include the approved Project Brief in your Graduation Report as Appendix 1. !

family name _____
 initials _____ given name _____
 student number _____
 street & no. _____
 zipcode & city _____
 country _____
 phone _____
 email _____

Your master programme (only select the options that apply to you):

IDE master(s): IPD Dfl SPD

2nd non-IDE master: _____

individual programme _____ (give date of approval)

honours programme: Honours Programme Master

specialisation / annotation: Medisign

Tech. in Sustainable Design

Entrepreneurship

SUPERVISORY TEAM **

Fill in the required data for the supervisory team members. Please check the instructions on the right !

** chair Jos Oberdorf dept. / section: Design Engineering
 ** mentor Caroline Kroon dept. / section: Design Engineering
 2nd mentor Frits Hogen Esch
 organisation Artis
 city Amsterdam country Holland

Chair should request the IDE Board of Examiners for approval of a non-IDE mentor, including a motivation letter and c.v.



Second mentor only applies in case the assignment is hosted by an external organisation.



Ensure a heterogeneous team. In case you wish to include two team members from the same section, please explain why.

comments (optional) Caroline Kroon has previously coached me, her approach suited my workstyle. Jos Oberdorf will add value to the team with his expertise on product design and development. Both will complement each other and add to my project.

Procedural Checks - IDE Master Graduation

APPROVAL PROJECT BRIEF

To be filled in by the chair of the supervisory team.

chair Jos Oberdorf

date 11-02-2020

signature

CHECK STUDY PROGRESS

To be filled in by the SSC E&SA (Shared Service Center, Education & Student Affairs), after approval of the project brief by the Chair. The study progress will be checked for a 2nd time just before the green light meeting.

Master electives no. of EC accumulated in total: _____ EC

Of which, taking the conditional requirements into account, can be part of the exam programme _____ EC

List of electives obtained before the third semester without approval of the BoE

YES all 1st year master courses passed

NO missing 1st year master courses are:

name _____

date - -

signature _____

FORMAL APPROVAL GRADUATION PROJECT

To be filled in by the Board of Examiners of IDE TU Delft. Please check the supervisory team and study the parts of the brief marked **. Next, please assess, (dis)approve and sign this Project Brief, by using the criteria below.

- Does the project fit within the (MSc)-programme of the student (taking into account, if described, the activities done next to the obligatory MSc specific courses)?
- Is the level of the project challenging enough for a MSc IDE graduating student?
- Is the project expected to be doable within 100 working days/20 weeks?
- Does the composition of the supervisory team comply with the regulations and fit the assignment?

Content: APPROVED NOT APPROVED

Procedure: APPROVED NOT APPROVED

comments

name _____

date - -

signature _____

Redefining mobility for kids and their caregivers in Artis

project title

Please state the title of your graduation project (above) and the start date and end date (below). Keep the title compact and simple. Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

start date 27 - 01 - 2020

26 - 06 - 2020

end date

INTRODUCTION **

Please describe, the context of your project, and address the main stakeholders (interests) within this context in a concise yet complete manner. Who are involved, what do they value and how do they currently operate within the given context? What are the main opportunities and limitations you are currently aware of (cultural- and social norms, resources (time, money,...), technology, ...).

This project is in collaboration with Artis Amsterdam, the oldest Zoo of the Netherlands. With 1.4 million visitors per year, Artis wants to inspire and stimulate a wide audience to deal with nature in a responsible way.

The project is about redefining mobility for children (2-5 years) and their caregivers in Artis. Visitors in Artis walk around or through the animal enclosures during their park visit. Children carts, a service provided by Artis, are used by caregivers to move young children around the park (figure 2).

Artis

The most important stakeholder of Artis are their visitors (Jaarverslag, 2018). To Artis, ensuring the best possible visitor experience for young and old is of great importance.

The visitor experience includes accessibility. Within this, mobility (services) for young children and their caregivers play a big role. The current mobility service, children's carts, for children and their supervisors, are not sufficient. Currently there are 60 carts available, increasing the amount of carts is recommended as a quick win to improve the overall visitor experience (Factpackhoreca en overige faciliteiten, 2019). More carts are needed to deal with the increase of visitors. Adding carts is not considered as an option because of the lack of space inside the park. Artis considers the carts as iconic and is hesitant to change the carts (figure 2).

The role and needs of the internal stakeholders within Artis (and the project) need to be determined in the first week of the project.

Children (2-5 year) and their caregivers

Children form a significant part of the target group of Artis. Young children are in need of a stroller during a visit to Artis since they are not able or do not want to walk for a longer period of time. Caregivers can bring their own stroller or can use one of the children carts available in Artis. They are the current users of the children cart service. Redefining mobility from a user perspective is an opportunity to ensure the service fits the needs of the visitors.

space available for images / figures on next page

Personal Project Brief - IDE Master Graduation

introduction (continued): space for images

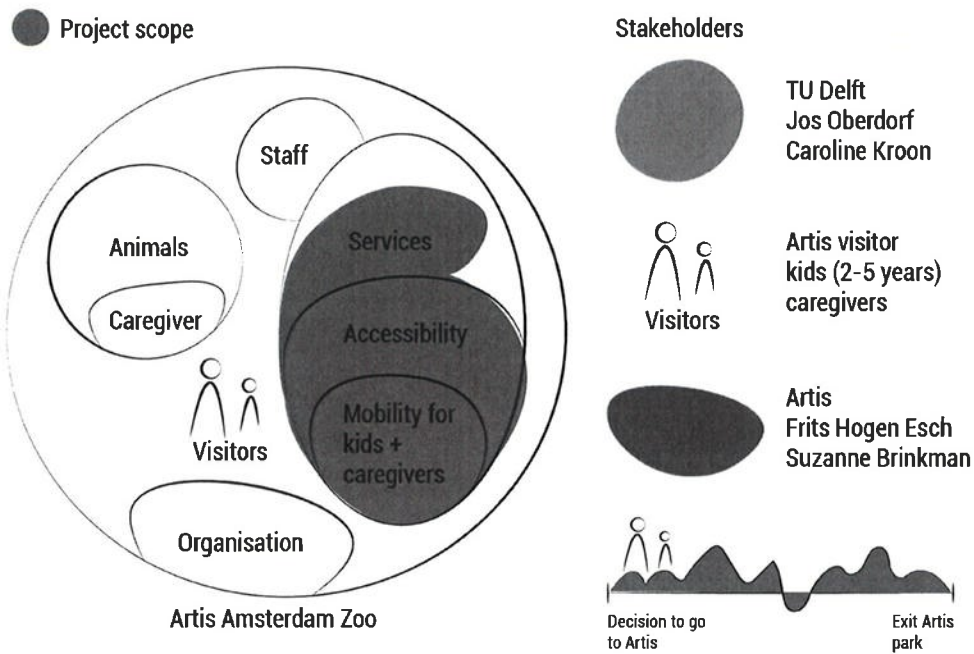
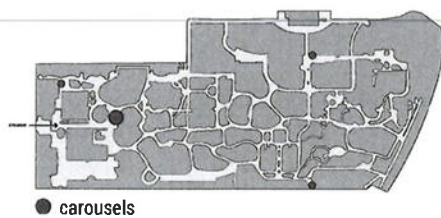


image / figure 1: Scope project (green) and stakeholders

Current situation



60 carts available for children between 2-5 years old



Carts are attached a carousel or bar for storage, can be detached for use with a 2 euro coin

Problem definition

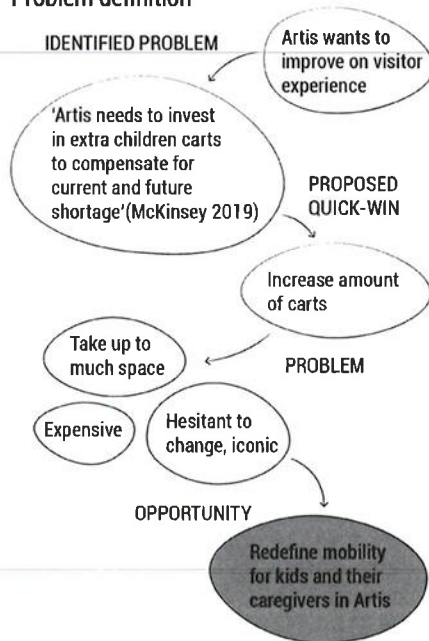


image / figure 2: current situation (left), problem definition (right)

PROBLEM DEFINITION **

Limit and define the scope and solution space of your project to one that is manageable within one Master Graduation Project of 30 EC (= 20 full time weeks or 100 working days) and clearly indicate what issue(s) should be addressed in this project.

Goal

Enhancing accessibility for visitors with kids (2-5 years old) by redefining mobility in Artis to improve the overall visitor experience.

Scope (figure 1)

To improve the overall visitor experience of Artis, I want to focus on redefining mobility for children and their caregivers in Artis. The experience begins when the decision is made to go to Artis, and ends the moment the visitors exit the zoo. The decision before entering Artis to bring your own stroller or to rely on the services provided by Artis is important as well as the experience of using the service when being in Artis.

Solution space

The solution space for this project is entered when the role of the current carts is identified for all stakeholders involved and the usability of the current cart is analyzed. These results, together with an experience map of the current service (including pain points, key experience moments and challenges) and an analyses of child mobility options currently used, will be used to enter the solution space.

Approach

For this project I want to use the Basic Design Cycle (van Boeijen et al, 2013) as underlying approach. To get an in depth understanding of the user and the context I will use human centered design methods (IDEO). The design process is nonlinear, therefore I will repeat the basic design cycle for different (sub) challenges to enable an iterative process.

ASSIGNMENT **

State in 2 or 3 sentences what you are going to research, design, create and / or generate, that will solve (part of) the issue(s) pointed out in "problem definition". Then illustrate this assignment by indicating what kind of solution you expect and / or aim to deliver, for instance: a product, a product-service combination, a strategy illustrated through product or product-service combination ideas, In case of a Specialisation and/or Annotation, make sure the assignment reflects this/these.

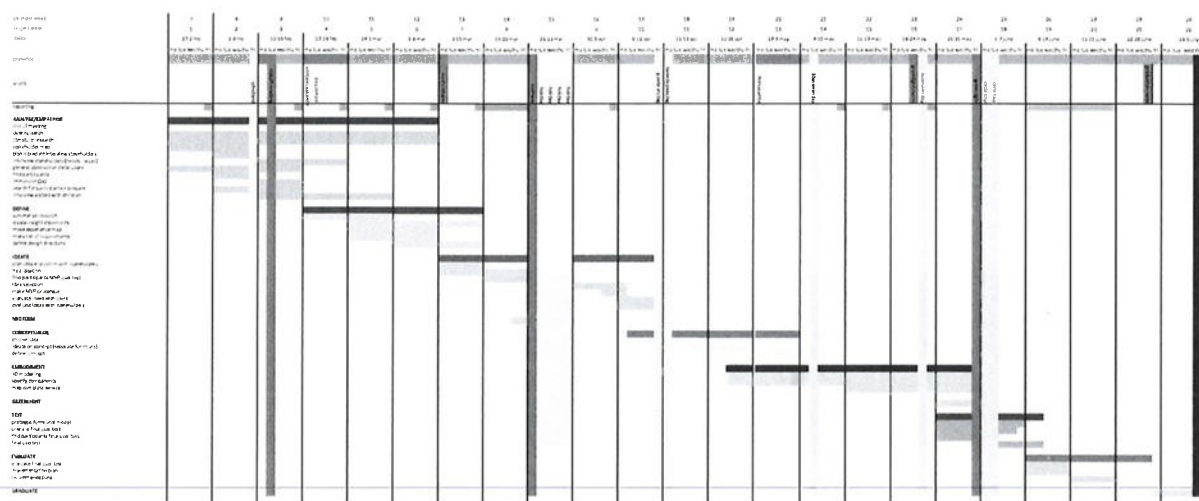
I want to design a product-service combination that fulfills the mobility needs of the visitors (children 2-5 years and their caregivers) of Artis, a sustainable solution that can be implemented in short term, and will last for the future.

I am going to give insights in the current visitor experience (visitors with children) in terms of mobility, to distill the needs for the future experience. Based on this, I will propose a concept (prototype), evaluated by the stakeholders, with recommendations for further development.

PLANNING AND APPROACH **

Include a Gantt Chart (replace the example below - more examples can be found in Manual 2) that shows the different phases of your project, deliverables you have in mind, meetings, and how you plan to spend your time. Please note that all activities should fit within the given net time of 30 EC = 20 full time weeks or 100 working days, and your planning should include a kick-off meeting, mid-term meeting, green light meeting and graduation ceremony. Illustrate your Gantt Chart by, for instance, explaining your approach, and please indicate periods of part-time activities and/or periods of not spending time on your graduation project, if any, for instance because of holidays or parallel activities.

start date 27 - 1 - 2020 26 - 6 - 2020 end date



My graduation planning is spread over 22 weeks, I am going to study full time. After my mid-term I will take a one week break. Due to the public holidays in Q4 and a planned cycling tour, my graduation is extended for two weeks which adds up to 22 weeks.

I will start with the analysis phase. This phase consists out of desktop and literature research (benchmarking, psychological development kids, cultural differences in raising, state of the art), context analysis and general observation, immersion, preparation and execution of user interviews, stakeholder analyses and interviews (needs, values, requirements). The results of the analysis are translated in requirements, insights, and an experience map in the synthesis phase. Ideation starts two weeks before the midterm, time to go crazy on my ideas. During the midterm, the analysis, key findings and first ideas are presented.

After the midterm, a concept evaluation session will be planned and executed with Artis visitors and other stakeholders. After this, the conceptualization and embodiment phase start. During these phases, ideation is planned for the different sub-functions and all components are designed, a 3D-model is made. This information is summarized in the green light report.

After the green light meeting, a prototype of the concept will be made and tested with the user. Recommendations and an implementation plan will finalize the graduation report.

To encourage myself to work in an iterative way, the different phases in the planning overlap.

MOTIVATION AND PERSONAL AMBITIONS

Explain why you set up this project, what competences you want to prove and learn. For example: acquired competences from your MSc programme, the elective semester, extra-curricular activities (etc.) and point out the competences you have yet developed. Optionally, describe which personal learning ambitions you explicitly want to address in this project, on top of the learning objectives of the Graduation Project, such as: in depth knowledge a on specific subject, broadening your competences or experimenting with a specific tool and/or methodology, Stick to no more than five ambitions.

My personal goals for this project are firstly, focusing on enjoying the project and learning instead of feeling the urge to make this project my final masterpiece. Secondly, I want to actively manage my stress level, do the best I can without overworking, by recognizing when I am overthinking and asking feedback before finalizing to much.

I want to work visually, since I like to make visual overviews. I think it is a powerfull communication tool that I like to improve on.

Furthermore, I would like to Improve my 3D modeling skills by using Fusion360 throughout the conceptualisation.

FINAL COMMENTS

In case your project brief needs final comments, please add any information you think is relevant.

