# INFOMMMI 2024-2025: Information about projects & related procedure

#### **PROJECT PITCHES**

General comments & procedure

In the lecture on **Wednesday, February 26, 2025**, we will have project pitches. Given the large number of groups, we will already start at 13:15 (but you only must attend either the first or last two hours). Each group is supposed to shortly pitch their project idea and have a quick discussion about it. This will be the basis for the final project plan, which is due Friday, February 28, 23:59, 2025. **Attendance is mandatory** in some time slots (which ones will be decided later).

Each group will have maximum 10 minutes for their pitches (including discussion). Thus, make sure that you are ready to present when it's your turn. Once the number of groups is fixed, a schedule will be announced with your presentation time.

Each group is supposed to give a **project pitch (max. 5 minutes)** using the slides and structure denoted in the related template (see following pages). Deviations from the template and style are possible, but make sure that the overall structure is the same (e.g., similar number of slides, order, and content). It is up to you, which team member(s) will do the presentation.

The pitch is followed by **5 minutes of discussion**. The pitch is not a test, but the purpose of this pitch & discussion is to help you in setting up your project and specifying your goals. Thus, it is perfectly okay to also present initial ideas or options you are planning but have not decide upon yet. Try to take advantage of this event in a way that benefits you most. For example, you could also encourage people to give you input for issues you are unsure about and would like to get some feedback. Ideally, all team members are actively involved in the discussion.

**Email the slides** for your pitch to <a href="mailto:m.doyran@uu.nl">m.doyran@uu.nl</a> on or before **Monday, February 24, 2025,** 23:59 following the rules stated below. Minor modifications on the slides before the presentation are okay.

In the final report, you will be required to denote how many hours you spent on the project. Thus, **start keeping a logbook now**, so you can later illustrate how many hours you spent on the project and how.

# Important when emailing your slides:

- Use the following subject for your email with (name) being the name or acronym of your project: [INFOMMMI] Pitch (name)
- Include <u>all</u> **team members** in *cc*.
- Use the following file name with (name) being the name or acronym of your project: INFOMMMI\_(name)\_pitch.pdf

#### **Related deadlines**

- **Now**: Start tracking hours and activities spent on the project in a logbook.
- Feb 24, 2025, 23:59 or sooner: Email slides for project pitch.
- Feb 26, 2025, (time TBD): Pitch your project ideas in class.

Structure of pitch & relation to project plan

Your project should make a contribution to the field of *multimodal interaction*. Thus, your project pitch should:

- 1. Clearly address a related problem or research question in multimodal interaction (focusing on an interaction problem with a single modality is okay, too)
- 2. Introduce your intended solution or issue to study to solve the problem and answer the research question, respectively
- 3. State your methodological approach (i.e., how you intend to show that your solution or study solves the problem or answers the question, respectively)

Your pitch should have one slide addressing each of these three aspects. In addition to that, there's a title slide and an optional closing slide. Slight deviations of this scheme are okay, if it makes more sense for your project.

Statements on the slides should be short and precise, but this is not a regular presentation. Thus, bullet points with key phrases as well as full text is fine.

The following pages provide you with a rough template and some comments. Since projects can differ significantly, not everything might apply to your concrete plans.

# **Template / structure of slides for the pitch:**

Aspects to address in the pitch (slight deviations are okay if they serve a good purpose):

#### Slide 1: Title (Name and team members)

- Start your presentation with a title slide that has your team or project name as title and lists all team members.
- Chose a team or project name that will serve as an identifier throughout the course. Note that it will also be used in file names, so be short or have an acronym, too.

#### **Slide 2: Problem introduction**

- Shortly state your problem here.
- Motivate why it is a problem.
- Illustrate why it is relevant.

# Slide 3: Solution / research

- If you address an engineering problem or have a new, innovative idea for multimodal interaction, clearly state what it solves, what is new about it (and why it is relevant or better than the state of the art), etc.
- If you address a research problem, introduce your research question here.
   Based on the (informally stated) problem, make sure to clearly identify the (sub)issue that you will be studying, then state a concrete research question and hypothesis.

# Slide 4: Methodology and results/solutions

- How will you verify your solution or answer your research question, i.e., what methodology will you be using?
   E.g., prototype implementation, empirical research, etc.
- What concretely will you measure, test, etc. to prove that?
   E.g., how will you evaluate your prototype?
   Or what kind of empirical research will you be doing to answer your research question?

#### Slide 5: Other issues (if any)

This is an optional slide where you could list, for example, things that are not clear yet, issues you'd like to discuss with the audience or get feedback on (hint: the more concrete you are, the more likely you will get useful answers), or any other issue that you consider noteworthy.

#### **PROJECT PLANS**

General comments

Deadline for delivery is **Friday**, **February 28**, **2025**, **23:59** via email to <u>m.doyran@uu.nl</u>. Use the template from the website. Keep the following issues in mind:

- This project plan is mostly intended as help for yourself, which means it is not part of the grading. Yet, a good planning makes it more likely that you will end up with a successful project and a good grade.
- It is okay to change and adapt your plan later (in fact, it is strongly recommended to have a backup plan in case you run into problems).
- Because projects can be quite different, you can change the template if its content or structure is not applicable to your concrete plans. Yet, make sure the overall scheme stays the same (e.g., concrete specification of your actual research plans, planned contribution and how to verify it).
- The given space and size limits are not strict, but it is strongly recommended to keep it short. As a rule of thumb, the shorter and more precise the better, because it enforces you to focus on the major issues (which in turn will make it more likely to succeed with a good project that makes a clear contribution). Make sure though that each aspect fits on **one page** and start a new page for each.
- Because you have lots of freedom in choosing your topic, we cannot and will not verify the feasibility of your topic. It is part of the learning goals to gain experience in specifying your own projects (including a better understanding of what is feasible under certain circumstances, e.g., existing knowledge, available time, ...). Do not worry too much though. Just make sure to have a backup plan in case things do not turn out as expected.

# After the project plan deadline:

If necessary, you will get some feedback on your plans within a week after the deadline. If you want to discuss your plans with me in person, add a related note in your email and we can schedule a meeting. You can contact me any time of course if you have questions about the project that you want to discuss with me.

#### Important when emailing your project plan:

- Use the following subject for your email with (name) being the name or acronym of your project: [INFOMMMI] Plan (name)
- Include <u>all</u> **team members** in *cc*.
- Use the following file name with (name) being the name or acronym of your project: **INFOMMMI\_(name)\_plan.pdf**.
- If you use the MS Word to make your plan, also attach the doc file, so I can provide feedback directly in the file. Use the name
  - INFOMMMI (name) plan.docx
- If you use the LaTeX template or Overleaf, also attach a zip of the whole project, so I can provide feedback directly in the file. Use the name INFOMMMI\_(name)\_plan.zip

#### **Related deadlines**

■ Feb 28, 2025, 23:59 or sooner: Email project plan.

Project plan content & structure

You find a **Word template** for download on the course website under "PROJECT". You are not required to use Word if you prefer other tools. Yet, stick to the general structure and follow related comments such as size limits or recommendations. And <u>stick to the given page breaks</u>, since this makes it easier to check the plan and give feedback.

In the final report, you will be required to denote how many hours you spent on the project. Thus, **start keeping a logbook now**, so you can later illustrate how many hours you spent on the project and how. Ideally, you should spend about <u>105 hours</u> on the project <u>per person</u>.

The first page of the report template will look like the first one of the project plan but in addition, each team member must write down their hours and one to three sentences summarizing their contribution to the project. This is mostly to guarantee that each team member contributes equally in time and content. Ideally, all members get the same grade, but if there are major differences, this could be considered in the grading (both positively and negatively).

Follow the structure below and keep the page limit of one page per item. If you have other things you want to specify and write down, you can add additional pages. This is optional and no rules or guidelines exist for those pages, since they are project dependent.

# Template, first page: Title & members

The first page of your project proposal (= title page) should specify your project name (or team name) and list all team members. You are supposed to use your team or project name in the files that you send to me, so make sure you chose one that represents your project well. And if it is too long for file names, then have an acronym, too.

#### Template, second page: Major research proposal & project description

Page 2 summarizes your project idea and research proposal. Keep it short and to the point. Ideally, this should be **no longer than one page** (shorter is encouraged). Remember the notes for the project pitches from above when filling out this part.

#### 1.1 Problem

This should be a research or engineering problem related to multimodal interaction.

#### 1.2 Solution

This specifies a concrete issue or sub-problem that needs to be addressed and resolved in order to deal with the problem introduced in 1.1. Make sure that it also implicitly reflects what type of work is needed to address this (e.g., empirical research or a new technical solution if you are focusing more on an engineering problem).

If you are focusing on an engineering problem, you will (shortly) introduce your idea here. If you are focusing on a research problem, you will introduce your research question here, and likely state a hypothesis.

# 1.3 Methodology

This should illustrate how you want to address the problem, i.e., verify that your solution works and is better than the state of the art, or how you want to answer your research question (e.g., with a related empirical study). No details are needed here (but be concrete; don't just state that you are doing an empirical study but what kind, etc.).

# 1.4 Contribution

Ideally, just one sentence summarizing your concrete results (e.g., what answer you expect for your research question) plus one sentence summarizing how they contribute to the bigger picture (e.g., how this answer contributes to the field of multimodal interaction).

**Note**: It is okay to make changes to this plan throughout the project as long as it is clear that you made educated and good decisions that justify those changes.

#### Template, third(-fourth) page: Planning and organization of your project

Page 3(-4) of your proposal should address general planning-related issues. Ideally, this should be short (**one to two pages**) and can be in key phrases and bullet list style. It is more intended to enforce you to think about these issues and identify potential pitfalls at the start of your project than a concrete requirement.

Template, third(-fourth) page: Planning and organization of your project (cont.)

#### 2.1 Work distribution

Think about how you will distribute the work and who will do what. No need for long elaboration on this. It is mostly intended to force you to discuss this in the group and verify if you have the necessary knowledge in the team to achieve your goals. Also, try to identify dependencies and think about if you could deal with related issues that might come up (people might get sick or drop the course; I hope neither of this will happen, but it's good to be prepared and have backup plans; no need to write this plan down, but it is important to think about it now).

## 2.2 Communication, organization, ...

As in 2.1, this is mostly to enforce you to discuss it and make related decisions. Thus, no need for detailed elaboration. For example, it could just be a bullet list with things such as "stand in meetings after Friday's lectures", "in person meetings on Wednesday mornings", "regular Skype sessions", "code sharing via SVN server", "document sharing via Google Docs", etc. Be considerate that some students might not be able to join physical meetings due to COVID and prepare accordingly.

#### 2.3 Resources needed

Think about what you need and, most importantly, if you have it. A short list (bullet point style with key phrases) should be sufficient. Keep in mind that this includes, e.g., hardware (do you have access to the necessary devices; also make sure you are not depending on just one person who owns one), software and development tools (do you have access to them, are you familiar with the programing language or do you need to plan some extra time to learn it, etc.), but also things related to your evaluations (e.g., do you need a special room, do you have access to a sufficient amount of test subjects needed for your experiments; keep in mind that it is okay to make compromises given the short duration of this project, but also remember that these should be educated and justified decisions).

# 2.4 Potential issues & risks

Think about things that might come up and list them here (or above if they are related to the issues under 2.2; see, for example, the related comments on dependencies or extra time needed to learn a programming language). Ideally, you also shortly note how you plan to deal with it if it becomes an issue (e.g., for programming language, you could have an "incremental" plan that allows you to do a study also with a simple implementation if your initial plans turn out to be too ambitious).

#### 2.5 Other issues

If you think there is anything else that is noteworthy, put it here.

#### Template, last pages: Time planning & ethical aspects

The next page should summarize your **time planning**. Mandatory deadlines and related deliverables are already listed. It is recommended to plan your project around these. Also, it is good to specify some milestones that you want to have reached at certain points. That will also help in a timely identification of issues that might force you to adapt your original planning.

For the intermediate presentation on March 9, make a list summarizing the **goals you** want to have achieved by then. Please refer to the related comments about the intermediate presentation below.

Finally, research related to interaction always involves humans, which in turn always raises **ethical aspects**. (This is true for any kind of research, but when humans are involved, it becomes more obvious, and consequences might be more immediate.) Thus, add some related words and fill out the ethics quick scan provided by the university (see project plan template). Any project idea that would require a full ethical review will be rejected because it is timewise not feasible as part of this project.

# INTERMEDIATE PRESENTATION

General comments & procedure

On **Wednesday, March 12, 2025**, each group must present their project progress in class. The project plan should contain a list of goals you want to have achieved by then. <u>Your presentation should address them</u>. Other than that, there are no rules (since it differs very much for the projects and what concrete topics you have chosen). The idea is that you discuss then if you achieved your goals so far, and if not, decide if changes to the project plan are necessary.

This is not part of the grading, but the intension is to (a) enforce that you start early on with your project work and (b) make sure you identify possible issues and problems in time, so there is enough time left to react and revise your plans accordingly. Thus, there is also no need to worry if you haven't reached your goals. It is better to make an honest self-reflection and change your plans than pretending that everything goes smoothly and later run into problems.

Time for presentations (including discussion) will be max. **15 minutes per group**. As a rule of thumb, plan 10 minutes presentation and 5 minutes discussion (but it is up to you in the end; again, keep in mind that this event is to help you with your project, so if, e.g., you think you would benefit from a longer discussion, you are welcome to keep your talk shorter).

Because we have more groups than we could fit into the regular lecture times, we will also use the following time slot (till 16:45). A schedule will be arranged once the final group number is known. It is mandatory to attend the time slot in which your group will be presenting plus one more (but you are of course welcome to attend all off them if you want). Email the slides for your intermediate presentation to <a href="mailto:m.doyran@uu.nl">m.doyran@uu.nl</a> on or before Monday, March 10, 2025, 23:59. The slides are not part of your grading, but it would be good for me to have them in case I want to provide some feedback or hints to you later.

# Important when emailing your slides:

- Use the following subject for your email with (name) being the name or acronym of your project: [INFOMMMI] Midterm (name)
- Include all **team members** in cc.
- Use the following file name with (name) being the name or acronym of your project: INFOMMMI\_(name)\_midterm.pdf

# **Related deadlines**

- March 10, 2025, 23:59 or sooner: Email slides for the presentation.
- March 12, 2025, (time TBD): Present your project status in class.

# SCIENTIFIC PAPER & PEER REVIEW

General comments & procedure on the peer review of the first part of your paper For the final deliverable, you are supposed to write a **short scientific paper** about your research project. Because students from previous years suggested that peer review of the first part of scientific paper would be helpful, you find some related information here. Further details about the final deliverables and procedure are given below.

Your paper must be in the form of an **ACM CHI conference extended abstract paper**. The <u>page limit is max. five pages</u> and strict (references do <u>not</u> count towards the page limit). The template for it can be found on the course's website.

The paper should summarize your project and include all aspects of a scientific publication, such as, motivation and problem introduction, your solution and approach, your findings and the contribution of your work. The page limit is low. But consider that the project duration is also short. It is very unlikely that you will be able to make a scientific contribution in such a short amount of time that would justify a longer paper. The "Extended Abstracts Format" is particularly intended for smaller results, work in progress, and initial studies, and thus very well suited for the course project. It is part of the learning goal that you get a better understanding of how to present your work; including separating the most relevant and

essential parts from the details, which might be important, too, but not essential for a published paper.

It is always advisable to write your paper (or later your thesis) in parallel to doing your research and not after you have finished it. Thus, by the deadline, you should be able to have a **first version of your paper** that contains the introduction (including references to related work if applicable), your research question and goals, and the method section. It is also advisable to include a draft (e.g., in form of structured bullet lists) of what will be in the result and analysis section. This first version (let's call it "part 1" of your paper), will be **peer reviewed** by one other group (which one will be determined later).

On the course's website, you find a **rubric** that you should use **for your review**. You should at least give feedback on the parts marked in blue. It is up to you how you organize the review in your group, for example, if only some members do it or if everyone gives feedback. The peer review is not part of your grading but intended to help you and your fellow students. Thus, try to make it as valuable for the other group as you can. It can also help improving your own work when you see the positive and negative aspects of the other group's paper.

# Important when emailing your first paper version:

- When sending your paper, use the following subject for your email with (name) being the name or acronym of your project: [INFOMMMI] Review (name)
- Email it to the group that is supposed to review your paper and include <a href="m.doyran@uu.nl">m.doyran@uu.nl</a> and <a href="m.doyran@uu.nl">all</a> your group members in <a href="m.doyran@uu.nl">cc.</a>
- Send a PDF using the following file name with (name) being the name or acronym of your project: INFOMMMI\_(name)\_review.pdf
- Also, when you have done the peer review for another group, send it to your peers in a PDF via a "reply to all" to the email that they sent you.

#### **Related deadlines**

- Mar 24, 2025, 23:59 or sooner: Email first version of your paper to your peers.
- Mar 31, 2025, 23:59 or sooner: Email your peer review to the other group.

Once all groups are fixed, you will find the names of all group members, the groups who will send you their paper, and the group that will review yours in the spreadsheet in MS Teams that we also use for signup. You can also contact people via MS Teams to figure out their email addresses, if you do not know them already.

FINAL SCIENTIFIC PAPER & PROJECT REPORT General comments & procedure Deadline for delivery is **Friday**, **April 4**, **2025**, **23:59** via email to <a href="m.doyran@uu.nl">m.doyran@uu.nl</a>. The following pages provide related comments and hints, also for the final presentations as well as grading criteria and procedure.

# The final report consists of two documents.

The **first document** contains two pages: one with information about your group (1 page), followed by a summary listing some formal things about your project (1 page). The **second document** is a short scientific paper (max. 5 pages; references do not count towards page limit) in the form of an **ACM CHI conference extended abstract paper**. Page limits are strict. The template for the scientific paper can be found on the course's website. For further information on the scientific paper please refer to the comments on the previous page.

#### Important when emailing your paper and report:

- Use the following subject for your email with (name) being the name or acronym of your project: **[INFOMMMI] Report (name)**
- Include <u>all</u> team members in cc.
- Use the following file names with (name) being the name or acronym of your project: INFOMMMI\_(name)\_report.pdf and INFOMMMI\_(name)\_paper.pdf
- If you use MS Word for the paper, also attach the doc file, so I can provide feedback directly in the file. Use the name INFOMMMI (name) paper.docx
- If you use LaTeX or Overleaf for the paper, also attach a zip of the whole project, so I can provide feedback directly in the file. Use the name INFOMMMI\_(name)\_paper.zip

#### **Related deadlines**

April 4, 2025, 23:59 or sooner: Email your paper and project report.

Project report content & structure

Your project report should contain two pages, with the content specified below. You can use the template from your project plan for the report.

#### First page: Project name, team members, special external issues (if any)

The first page of your report should contain the following three sub-sections:

- 1. Team or project name (& acronym if applicable)
- 2. List of your team members (incl. hours and tasks)
- 3. Comments on special ("external") issues, if any

For the second item, shortly describe how much and in which way they contributed to the project. In particular, write down the hours you spent for the project. Ideally, this should be around 105, but the outcome is more important than time spent. There is no need to hand in your logbook but keep it at hand in case there are any related questions or a need for discussion.

Shortly note how you contributed to the project. If you split the work more or less equally, just state that and copy-paste it for all members. Otherwise, give some key phrases or short sentences (1-3 should be more than enough). No need for details, but general statements are okay (e.g., something like: "some small parts of the implementation, about ¼ of the user studies, and large parts of the data analysis"). This is just to make sure that everyone contributes and that you split the workload fairly.

Under "external" issues you can list any general influences that might have had a negative impact on your project but were beyond your control (e.g., dropouts or longer sickness of particular team members, etc.). Hopefully, most of you will just state "none" here.

#### Second page: Used & produced material, special internal issues (if any)

The second page of your report should contain further information that is important for grading your work. No detailed information is needed here, but since we have projects that might build on existing work, it is important to clearly specify what you used and created yourself.

In particular, it should contain the following three sub-sections:

- 1. Material, content, tools, etc. used in this project (from others)
- 2. Material and content produced as part of this project (by you)
- 3. Comments on special ("internal") issues, if any

For the first item, specify tools and things that you used from others. It is totally okay and even encouraged to use existing resources, but you must specify it in order to get a fair judgement of your contributions. A short bullet list with key phrases should be sufficient in most cases. If you created everything from scratch, just state that in one sentence / bullet point phrase.

Likewise, for the second item, specify the material and content that you produced as part of this project. Again, a short bullet list should be sufficient in most cases. Make sure though that the amount of work and level of difficulty becomes clear if you think it is noteworthy. That is, feel free to list or note things that you think should have a positive impact on your grading but might otherwise get overlooked (e.g., a very difficult implementation or a statistical analysis that goes beyond the norm).

Under "Special ("internal") issues" you can list things that are noteworthy and/or might affect your grading. In contrast to the "external" issues from the first page, these should be things that you are directly responsible for (e.g., bad planning, overestimating your own skills, etc.). Notice that I do not expect all projects to go smoothly. Being able to demonstrate that you can react to difficulties in an appropriate way can be as valuable as not having any difficulties in the first place. Thus, you can take this part as an opportunity to demonstrate that you did make the right choices and good, educated decisions. Here you can also shortly list changes that you made or had to make to your original plan, if you think it is important to justify them (there's no need to explain every little detail).

# FINAL PRESENTATIONS Procedure

On **Wednesday, April 9, 2025**, each group will present their results in class. Due to the large number of groups, we will use two time slots. You should email the slides for your final presentation to <a href="mailto:m.doyran@uu.nl">m.doyran@uu.nl</a> on or before **Monday, April 7, 2025, 23:59**.

# Important when emailing your paper and report:

- Use the following subject for your email with (name) being the name or acronym of your project: [INFOMMMI] Presentation (name)
- Include <u>all</u> team members in cc.
- Use the following file name with (name) being the name or acronym of your project: INFOMMMI\_(name)\_presentation.pdf

#### **Related deadlines**

- Apr 7, 2025, 23:59 or sooner: Email slides for your presentation.
- Apr 9, 2025, (time TBD): Present your project in class.

#### **Group meetings**

Purpose & procedure

On Thursday or Friday after the final presentations, there is one individual meeting with each group where we discuss your results and all things necessary to make your final grading. Duration should be about 30 minutes (but **plan up to an hour** in case there are delays or reasons for further discussion), roughly for the following issues:

- Ca. 15 minutes presentation and discussion of additional things
  It depends on the projects what concretely will be discussed here; this is mostly an opportunity for you to show additional things that you did but were include in the report, paper, or presentation because I particularly encouraged you to focus on the major issues there.
- Ca. 15 minutes Q&As, final feedback, and grading-related discussion This will be more general things and everything related to your grading, what other issues to consider (e.g., non-result related things such as the aforementioned special "external" and "internal" issues), etc.

Note that these are just rules of thumb and things might differ for individual groups. There's a time buffer in case there are other important issues to discuss (e.g., individual issues for particular team members, etc.), so as said, plan some additional time at the end.

Due to time restrictions, we must schedule these meetings on days outside of the regular time slots of the course. If you have a time conflict and cannot make it to any of the proposed time slots, let me know as soon as possible. We will try then to find an alternative date. Because we discuss grading-related issues there, all team members must be present

#### Related deadlines & dates

• Apr 10-11, 2025, (times TBD): Individual group meetings (likely online)

#### **GRADING**

Some comments on the grading & related criteria

Note that the following information is non-binding. Changes may apply and I reserve the right to deviate from it in case individual situations suggest that it is better to do so. These are more rules of thumb, and grading criteria may diverge a little (e.g., by rating something that you did particularly well higher to improve your grade, but also by giving a higher relevance to things that you didn't do well enough to justify a high grade, even if you fulfil other related criteria).

Generally, there are three **aspects** (plus a fourth one if applicable) **that will be considered** in your grading:

- 1. Your deliverables (for most, this will be the implementation & related results from the user study / data analysis that are summarized in the scientific paper)
- 2. Your presentation at the end (where you present your results)
- 3. The impression and discussions we have in the closing group meetings.

Note that I reserve the right to reduce the grade by up to 0.5 if you continuously violate formatting rules or other regulations.

The **informal procedure** for the grading (pragmatic approach) will be as follows:

- 1. First impression based on report & presentation
- 2. Verification and major judgment in meeting
- 3. Final grade based on comparative analysis

#### Criteria used to determine the actual grade are:

- 6 = Minimum requirements, i.e., something that works (prototype) and a finished evaluation (e.g., small user study), both of which must "make sense"
- 7 = Everything is done well (no major flaws or issues), and a few things are done particularly well (e.g., a good data analysis or evaluation setup; a very good, innovative or original idea related to multimodal interaction; etc.)
- 8 = 7 but everything done particularly well (or some stuff done extremely well; see below for examples)
- 9 = 8 but some (>1) stuff done extremely well (e.g., a demo or report that we would show off for advertisement)
- 10 = Everything done extremely well

  (e.g., if the whole project including all its results and deliverables could be shown
  off to the public as excellent achievements or being submitted as paper to a
  scientific conference)

Because part of the idea of letting you do a "free" project like this is also to better prepare you for your master thesis projects, it might be a good idea to also look into the related criteria. According to the MSc grading scheme used in our department, these are:

# Process (weights 30% for thesis grade)

- Independence in execution of the project \*
- Independence in writing the report/proposal \*
- Planning and meeting deadlines
- Communication
- Integrity and responsibility
- · Critical and reflective attitude

# Presentation (weights 10% for thesis grade) \*\*

- Structure
- Context
- Content
- Quality of the slides/media
- Presentation skills
- Suitability for the audience
- Ability to cope with questions

#### Report (weights 30% for thesis grade)

- Structure and clarity of presentation
- · Discussion of related work and context
- · Completeness and correctness of arguments
- English usage
- General appearance (layout, figures and tables, etc)

# Results (weights 30% for thesis grade)

- Quality of the results
- Quantity of the results
- Difficulty of the project

For this project, no strict weighting scheme will be used. Group grades will be discussed with all team members in the final group meetings).

<sup>\*</sup> This is a course project, not a thesis project. You are welcome and encouraged to ask teachers for help. "Independence" in this context does not mean that you didn't need any help, but how well you dealt with the feedback and used it to improve your work.

<sup>\*\*</sup> For the project, only the final presentation is relevant for your grading (not the pitch and intermediate presentation, although a good performance there could potentially give you some extra credits in your final grade).