eduIDT

Application of Inclusive Design Thinking in the Technically-Oriented Subjects at HEI

Guidelines for Inclusive Design Thinking Tasks

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Co-funded by the European Union

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Introduction

Successful implementation of Inclusive Design Thinking (IDT) in the classroom depends not only on assigning tasks but also on how these tasks are introduced, communicated, and evaluated. This section provides practical recommendations for lecturers to present, guide, and assess assignments, ensuring that students understand expectations and experience the full IDT process.

1. Explaining the Tasks

When introducing IDT assignments, **clarity and context** are essential:

1. Explain the "why" before the "what":

- Present the goal of the assignment (e.g., understanding user needs, practicing empathy, creating and testing user-centered solutions).
- Link the activity to real-life projects, highlighting that students will work on **challenges faced by underrepresented groups**.

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2. Provide a clear structure:

- Share the IDT phases (Challenge → Empathy → Define → Ideate → Prototype & Test) and indicate where each task fits.
- Distribute printed or digital templates, such as: Challenge statements, stakeholder maps, persona, impairment sheet, feedback grids...

3. Use concrete examples:

- Show an example challenge (e.g., “How might we help a visually impaired person navigate public transportation safely?”).
- Briefly explain expected outcomes, such as: Number of sponsor questions prepared, user hypotheses generated, ideas clustered, or prototypes created.

Tip:

Begin with an **icebreaker or a mini Design Thinking sprint**, so students experience the method in a **safe, low-stakes environment** before starting the main project.

2. Communicating and Presenting Tasks to Students

Clear communication ensures that students understand the scope, process, and deliverables.

Break tasks into manageable steps aligned with IDT phases:

- **Preparation & Challenge**: Identify sponsor, clarify challenge, form teams, draft initial questions.
- **Empathy**: Observe, interview, or simulate the user experience.
- **Define & Ideate:** Cluster insights, create personas, generate "How might we..." questions.
- **Prototype & Test**: Build simple paper or digital prototypes, conduct user testing, gather feedback.

Highlight team responsibilities:

- Clarify which activities are individual, team-based, user-facing, and sponsor-facing.

for sponsor interaction:

Set expectations

- Explain when and how the sponsor will be involved (kick-off, occasional check-ins via email/video, and final presentation).
- Encourage students to prepare 10–30 open questions for meaningful interaction with sponsor.

Set expectations for user interaction:

- Explain how and when users will participate (interviews, shadowing, observation, questionnaires, prototype testing).
- Ensure teams prepare in advance (e.g., 30–50 interview questions, observation scenarios, and feedback grids).

Use visuals and templates:

- Display the IDT process diagram, filled template examples, and brief step-by-step instructions.

Tip: Form diverse teams of 3–7 students (gender, nationality, personality) to maximize collaboration and idea diversity.

3. Evaluating the Tasks

Assessment should reward both the process and the outcome, emphasizing engagement, creativity, and user understanding.

Suggested evaluation criteria:

Process & Engagement (30%)	• Active participation in team activities • Completion of all templates and milestones • Evidence of communication with sponsor and users
Application of IDT Methods (40%)	• Quality of **Empathy phase insights** (observations, interviews, user simulations) • Logical synthesis in **Define and Ideate phases** (personas, user journeys, "How might we" statements) • Creative and structured **ideation techniques** applied

Outcome & Presentation (30%)

- Prototype is **functional or clearly visualized** (paper/digital)
- Solution **aligns with real user needs and frustrations**
- **Presentation quality**: clear, engaging, with storytelling of the design journey

Tip:

Use feedback grids during final presentations to gather structured feedback from peers, sponsors, and lecturers in four categories:

- What works
- What to improve
- Additional questions
- New ideas

Inclusive Design Thinking Evaluation Table

Criteria	Weight	Excellent (5)	Good (4)	Satisfactory (3)	Needs Improvement (2–1)
1. Process & Engagement	40%	Actively participates in all team activities, fully completes all templates, communicates with sponsor and team proactively.	Participates regularly, completes most tasks, communicates with sponsor when prompted.	Limited participation, some tasks incomplete, minimal contact with sponsor.	Passive participation, major gaps in tasks or communication.
2. Application of IDT Methods	30%	Applies all phases rigorously (Empathy, Define, Ideate, Prototype & Test); insights are detailed and well-documented.	Applies most methods correctly; insights are clear but may lack depth.	Partial use of methods; some insights missing or unclear.	Poor application of methods; outputs lack structure or relevance.
3. Outcome & Presentation	30%	Prototype is functional or clearly visualized; presentation is clear, creative, and strongly connected to user needs.	Prototype understandable and mostly aligned with user needs; presentation adequate.	Prototype basic or unclear; weak connection to user needs; presentation minimal.	Prototype missing or irrelevant; presentation unclear or absent.

Inclusive Design Thinking Evaluation Table

Lecturer (50%)	Evaluates the overall process, application of methods, and final outcome.
Sponsor (30%)	Focuses on the solution's impact, relevance, and usability, but also communication during the whole process.
Peer feedback (20%)	Students evaluate only the "Outcome & Presentation" part.

4. Expected Outcomes

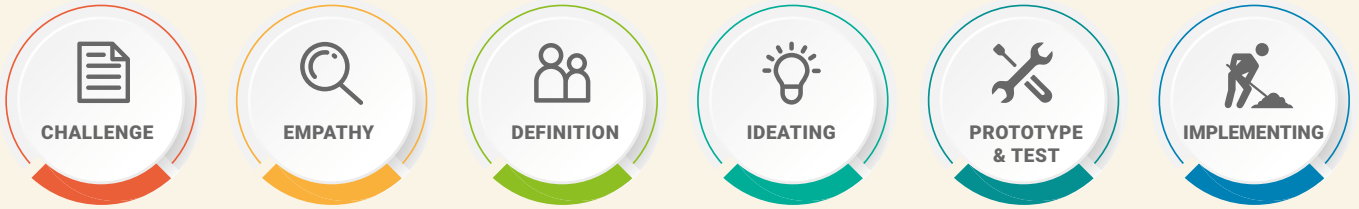
By following these guidelines, **lecturers can expect students to:**

- Gain first-hand experience with the complete Inclusive Design Thinking process.
- Develop human-centered prototypes addressing real social challenges.
- Learn collaborative teamwork and communication with external stakeholders.
- Produce tangible outputs such as: Personas, user journeys, idea clusters, and tested prototypes ready for presentation.

When tasks are clearly explained, structured, and evaluated, students not only complete the assignments but also develop practical design skills transferable to their professional and academic projects.

TASKS

INCLUSIVE DESIGN THINKING: TASK LIST



0. PREPARATION OF A PROJECT

responsibility for the task

- [ ] **Find a real sponsor (company / organisation / institution) with a challenge/problem/project they are currently facing** — professor
  - Search for organisation for disabled people, older people, corporation, city representatives, etc. with one dedicated person responsible for communication with professors and students.

- [ ] **Brief the sponsor what your expectations are, how much time they will need, and are able to dedicate to your subject, what information to prepare and what is the expected output** — professor
  - Important is to have the sponsor on the first and the last lesson when project is dicussed, to give the challenge and to evaluate the results, during the project it is enough for sponsor to be available on emails, or video calls occasionally. Whith the challenge, sponsor shuld be prepared for stattus qou questions, history of the problem, what solutions were tried and why they fail, etc.

- [ ] **Formulate the challenge into one sentence, or help your sponsor to formulate a challenge/project for your students** — professor
  - Organisations often give the challenge in their rethoric, e.g.: ""How to increase our profit, how to be the best on the market?" etc.
  - But the challenge should be focused on the user, e.g.: "How can we help a visually impaired person navigate a new environment and get to different places via public transportation?", "How can the gastronomy industry enable people with specific food diets to eat outside their homes without fear for their health?" or "How can we help mothers in remote areas to get medical assistance for themselves and their children?" etc.

- [ ] **Create a teams of 3-7 students** — professor
  - The more diverse team, the better. If it is possible different gender, nationality, personality.

- [ ] **Start with an introducing game in teams** — professor
  - Try e.g. "One truth, two lies" - each team member says three information about themselves, one is true and two are lies. The rest of the team guesses, which one is true. "Desert island" - each team member shares 3 items, they would bring on a desert island and why.

- [ ] **Dive into the method with Design Thinking mini sprint exercise in teams** — professor
  - Use Design Thinking mini sprint templates to guide students through design thinking process through their own experience.

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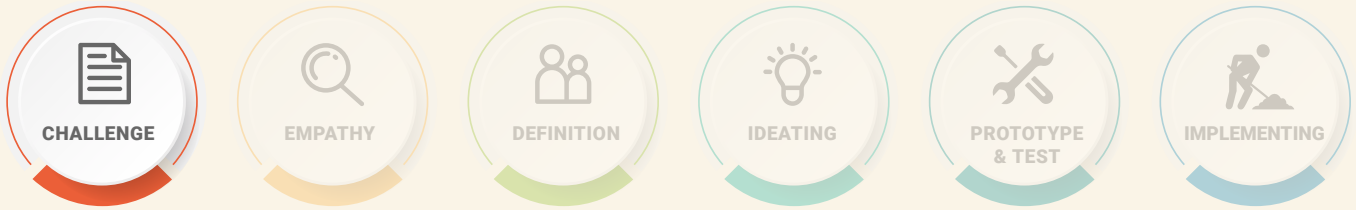

1. CHALLENGE

responsibility for the task

- [ ] **Distribute printed challenge (the sentence) in teams** — professor
  - Use A4 or A3 formate to print or write the challenge formulated or agreed with sponsor.

- [ ] **Dissect the challenge (the sentence) with students to get common understanding in the team and prepare questions for sponsor (at least 10 questions)** — students in teams
  - Team members should discuss each word of the challenge and formulate questions for the sponsor, if there is anything indefinite. Help students form open questions, so they can get as much information from the sponsor as possible.

- [ ] **Find out from your sponsor - the status quo of the challenge/project, what happened in the past, what worked and what did not and why, who are the target customers and information about them, what limitation there are (budget, personal, timewise,..)?** — students in teams
  - Help your students capture as much information as possible. Students should look for details, and if there is something missed, they can clearify it in the email afterwards, if the sponsor already left.

- [ ] **Define groups of users relevant for your challenge** — students in teams
  - In teams students should fill in users' groups in stakeholder map template and verify them with the sponsor.

- [ ] **Start with information available online regarding the challenge/project, what solutions are available on the market, what competitors/other organisations are doing/selling?** — students in teams
  - In teams students can start with checking the statistics, white papers, case studies, webinars, podcasts, blogs, discussion forums, succes stories, fuck-up stories, etc.

- [ ] **From all online information try to form hypothesis about your users, about their daily life, their needs, frustrations, what they like/dislike, what are their habits, in what conditions they live, what are their expectations, their motivations, fears, etc.** — students in teams
  - Help your students to form 10 - 30 hypothesis about your users, that will serve as basis for the engagement with them.

INCLUSIVE DESIGN THINKING: TASK LIST

2. EMPATHY

responsibility for the task

- [ ] **Get to know your user - based on your hypothesis decide in the team where, when and how will you learn all about your customer** — students in teams
  - In teams students should decide the place, time and participants. They can use filled-in Personas for inspiration, if they are relevant for the challenge. Help students use Research user matrix to set up the optimal research method for your users.

- [ ] **Observe your user - take your hypothesis with you and spend some time observing your customers in their "natural enviroment"** — students in teams
  - Brief students how to be invisible and to take extensive notes. The more information/details they capture, the more solid foundation for the innovative solution.

- [ ] **Become your user - try to live and act as your customer with their limitation (blindfolded, earplugs, using crutches, wearing artificial baby bump, etc.)** — students in teams
  - Write down your emotions and insights in details when going through the experience.

- [ ] **Listen to your user - create 40 - 60 open questions for your customers' interview, listen carefully what they have to say and write down all the answers with all possible details** — students in teams
  - Research script template will help your students. They can use also 5WHYs technique, if they feel appropriate and not to ask all 5Whys everytime, sometimes 2 or 3 is enough as long as it helps to understand users' motivations.

- [ ] **Share you insights about your user with the team and organise them** — students in teams
  - Help your students in teams to organise insights and information they have gathered in homogenous groups, divided by different users, different topics, or features.

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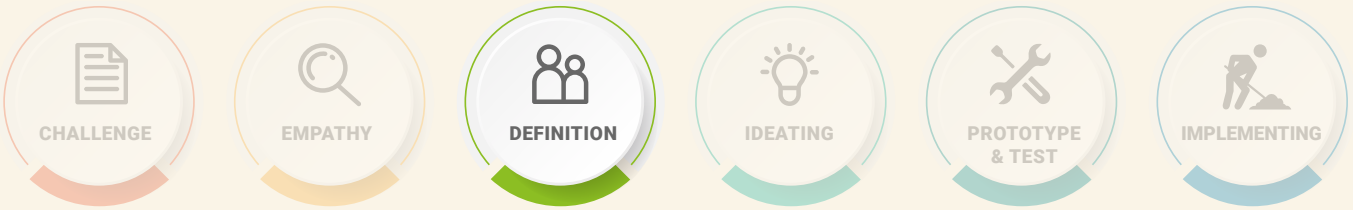

3. DEFINITION

responsibility for the task

- [ ] **Describe and define your user. Create Persona & Impairment sheet for your typical user** — students in teams
  - More personas may be created in teams, if the information about the users differ to much. It is more effective to have more Personas with different and detailed needs, frustrations, motivations, fears and other personal information, than to have one average Persona with very general information. The more specific persona, the more space for innovation.

- [ ] **Go through a typical experience for your user. Create Customer Journey for your typical user** — students in teams
  - Each Persona can have different Customer Journey when going through "challenged" situation. The situation students are trying to invent a solution for. In teams they should try to be as detailed as possible in creating Customer Journey and not to forget to list opportunities in each step of the journey, where a weak spot can be found.

- [ ] **Divide the original challenge (sentence) into smaller/more detailed challenges according to your findings about your users** — students in teams
  - Based on gained insights in the teams, help your students divide main challenge into smaller parts in form of "How might we" questions. Use "How might we" question template.

- [ ] **Prepare creative enviroment for ideas** — students in teams
  - When offline - use post-its, flipcharts, colored markers, space, where people can get up from chairs. When online - use MIRO, MURAL or other online tool for creative colaboration.

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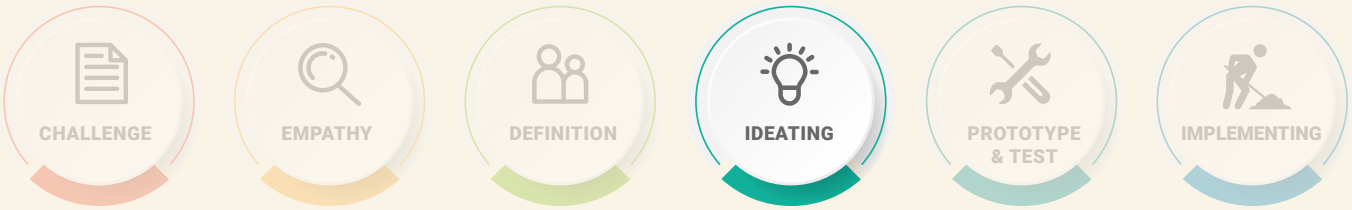

4. IDEATING

responsibility for the task

- [ ] **Be creative, this is the time to come up with as many ideas possible for your innovative solution** — students in teams
  - Lead your students through 3 - 4 brainstorming methods, but remember ideas should be relevant to "How might we" questions, or the main challenge. Students should come up with at least 50 ideas. Be supportive, this is the most difficult part regarding the trust in the teams. Use brainstorming golden rules.

- [ ] **Choose the most relevant / feasible / innovative ideas for further development** — students in teams
  - Help your students to select the best ieas. Lead them through dot voting, criteria based evaluation, or impact / effort matrix.

- [ ] **Visualise chosen ideas, start elaborating them towards solution** — students in teams
  - Introduce Idea Napkin template to your students. With visualisation, they can concentrate on details and further features, aspects of the solution. Remind teams to check if their solution covers needs, frustrations of their persona and answers the challenge.

- [ ] **Get in touch with your sponsor, to present thus far results and discuss the direction of the challenge/ project** — students in teams
  - Remind your students, that they should keep the sponsor posted. Sponsor should be aware what were the findings in empathy phase and now they can see the approach of the teams regarding the solution.

- [ ] **Materialize your visualised solution in a form that can be tested with the users** — students in teams
  - Help your students make their solution more tangible. In teams they can prepare: paper/online prototype, wireframe, diorama, or try to prepare a storyboard, or roleplay.

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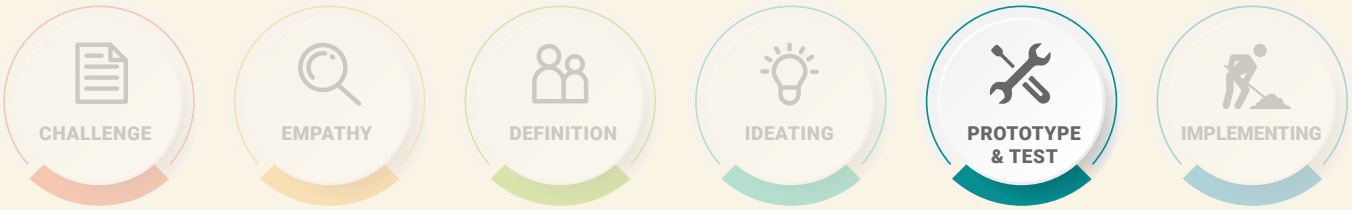

5. PROTOTYPE & TEST

responsibility for the task

- [ ] **Prepare for testing** — students in teams
  - Help teams prepare testing scenario. In teams they should appoint a person who will conduct the testing and ask questions if necessary, a person that will take notes and observe. Students should arrange users to come to testing for at least 45 minutes, but ideally for 1 hour.

- [ ] **Verify your prototype** — students in teams
  - Students should brief their tester, describe the situation and how to work with the prototype. Encourage them to be as brief as possible, prototype should be self-explanatory.

- [ ] **Take detailed notes during testing** — students in teams
  - Present students Feedback grid for capturing their answers. Teams should document as many details as possible, about tested features, aspects and user's emotions and reactions.

- [ ] **Fine-tune your prototype based on users' feedback** — students in teams
  - Help your students improve their prototype based on testers' reactions, questions and ideas

- [ ] **Test your improved prototype** — students in teams
  - Teams should test again their fine-tuned prototype with users (others than in the first testing round) and adjust their prototype based on the results. They should do as many rounds of prototyping and testing as they see fit and have time for.

INCLUSIVE DESIGN THINKING: TASK LIST

6. IMPLEMENTING

responsibility for the task

- [ ] **Put your solution into effect** — students in teams
  - Students can implement their solution into real life and help their users to have more fulfilling lives.
- [ ] **Never stop getting feedback and improve your solution constantly** — students in teams
  - Enviroment is constantly changing and products, services, applications need to change with it.