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**Interação Pessoa-Máquina**

**2025/2026**

**Classroom Finder App**

Stage 2: User and task analysis

Obrázok, na ktorom je grafika, dizajn, snímka obrazovky, logo

Obsah vygenerovaný pomocou AI môže byť nesprávny.

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**Problem**

New students on campus often face the problem of finding the correct location for their lectures. While the schedule may provide a building and room number, students frequently do not know where these places are. They may consult a campus map and locate the building, but once inside, the layout can be confusing, with numerous hallways and doors. This can lead to frustration and wasted time as they search for the classroom. In many cases, students have no choice but to ask a staff member for directions, which can result in arriving late to the lecture.

**Project** **Goal**

The main goal of this project is to help mainly students but also teachers navigating through the campus more easily and reach their classes on time. The project proposes a mobile app that integrates students’ and teachers’ personal class schedules with a GPS-style campus map, guiding them directly to their classrooms. It aims to reduce confusion, stress and delays.

**Users**

User Class 1: New Students / Staff

* Characteristics: Freshmen or Erasmus students, or new staff with little to no knowledge of the campus layout.

User Class 2: Students during Campus Construction

* Characteristics: Students of any year who must navigate the campus while certain buildings are under construction

User Class 3: Teachers during Campus Construction

* Characteristics: Teachers who must navigate the campus while certain buildings are under construction

**Tasks**

Task 1: Navigate to Classrooms (Campus Navigator)

* Objective: Provide GPS-like navigation across campus and inside buildings.
* Pre-conditions: User has selected a room, building, or facility as destination.
* Sub-tasks:
  1. Search or select classroom.
  2. View route preview (map + step instructions).
  3. Follow real-time navigation to the location.
* Exceptions: Indoor GPS signal issues; path blocked (construction).
* Characteristics: High frequency, highly time-sensitive (students before class).

Task 2: Upload and Store Class Schedule

* Objective: Students save or sync their class schedule in the app for easy access and easy navigation to the classroom.
* Pre-conditions: Schedule is provided (via photo upload, or manual input).
* Sub-tasks:
  1. Upload/import schedule.
  2. App converts it into a clean timetable.
  3. User taps on a class to see the navigation.
* Exceptions: Wrong upload format.
* Characteristics: Used daily.

Task 3: Use Simple and Intuitive Interface

* Objective: Ensure app is usable by both students and professors with minimal training.
* Pre-conditions: App is installed on user’s device.
* Sub-tasks:
  1. Open app and view clear home screen (visible buttons, minimal menus).
  2. Access either “Schedule” or “Search.”
  3. One or two taps max to start navigation.
* Exceptions: Overloaded UI; hidden menus that confuse users.
* Characteristics: Critical for older professors who want to help students quickly.

Task 4: Cross-Platform Usage (Mobile and Computer)

* Objective: Allow users to access the app on both mobile (for navigation on the go) and desktop (for planning at home/office).
* Pre-conditions: User logs in with the same account on mobile and computer.
* Sub-tasks:
  1. Open app on phone (for navigation) or computer (for planning schedule/routes).
  2. View synchronized data (schedule, saved routes, classrooms).
  3. Print/export routes or share with others if needed.
* Exceptions: Sync issues between devices; offline access.
* Characteristics: Moderate frequency; professors likely to use computer, students more on mobile.

Task 5: Security and Data Protection

* Objective: Ensure users’ schedules, personal data, and location history remain secure and private.
* Pre-conditions: User logs in with personal account; app has security protocols.
* Sub-tasks:
  1. Store schedule and personal data securely (encrypted).
  2. Give users control over what data is shared (e.g., navigation history).
  3. Allow logout and account deletion at any time.
* Exceptions: Unauthorized access attempts, data breaches.
* Characteristics: Continuous background task; builds trust and ensures long-term adoption.

**Scenarios**

Scenario 1: New student rushing to class

Lina, a new student, opens the app to see her timetable. Her next lecture is IPM in Building VII, Room 2A. She taps on it, and the app guides her step-by-step to the room.

Scenario 2: Student who struggles with timetables

Leo always saved his timetable as a screenshot in his phone gallery, which made him scroll through dozens of photos every day. Now, with the app, he uploads it once and can tap directly on each class to see when and where it is, plus how to get there.

Scenario 3: Professor helping a student

Professor Harry is approached by a lost student who can’t find Room 112. Even if the professor doesn’t know where the room is, he opens the app, searches “112”, and the app displays the route. He shows the map to the student, who follows it to class. The professor didn’t need complex menus or training just two taps.

**Interviews:**

New Student (Lina): Feels lost in the first weeks; stressed about being late. Wants navigation directly from schedule.

Student Who Struggles with Timetables (Leo): Finds screenshots inefficient. Wants a “one place” app for schedule + navigation.

Professor (Harry): Not tech-savvy. He wants the app to be as simple as possible. Also, like that it helps him support students when they ask for directions.