



# TIMETABLE PLANNER WEBSITE

Me-fi  
Prototype

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# Introduction



## Problem

HUST students face difficulties visualizing their timetables before course registration due to the lack of an official tool.

## User Focus

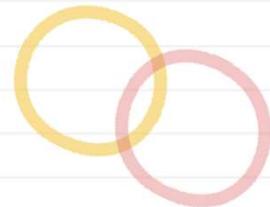
HUST students.



## Solution



A user-friendly app that allows students to customize and visualize their timetables quickly, ensuring smooth course registration.





## Value Proposition

Effortless timetable planning tailored for HUST students.



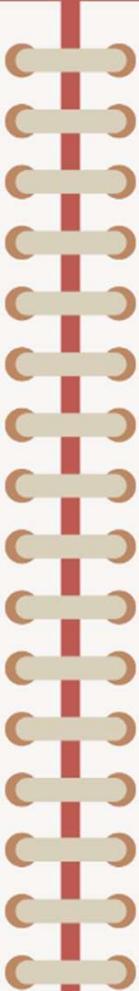
## Encoded Values

### Intuitiveness

Students should quickly understand how to use the website without needing instructions.

### Efficiency

Students need to organize timetables quickly to save time during course registration.



## PlanMate

Your best mate in college

### Personalization

Different students have different scheduling needs, so flexibility is crucial.

### Spatial Awareness

Knowing where classes are located helps students plan their day effectively.

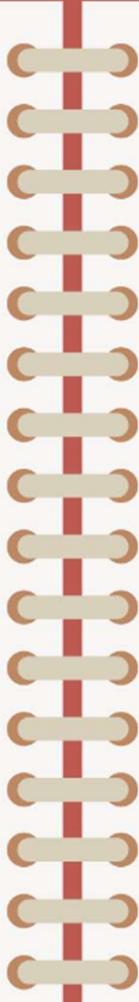
## **Value-Aligned Features**

### **Intuitiveness**

Drag-and-drop Excel upload with instant confirmation.

### **Efficiency**

Auto-generate timetable based on user preferences.



**PlanMate**  
Your best mate in college

### **Personalization**

Set custom preferences like off-days or study times.

### **Spatial Awareness**

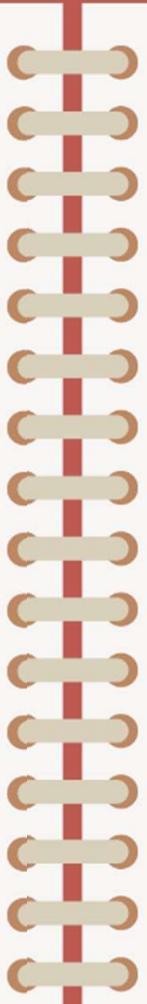
Campus map showing class locations clearly.



02

## Tasks

## 3 Tasks



### Simple Task

Export the personalized timetable to a PDF

### Moderate Task

View the campus map with class locations

### Complex Task

Automatically generate and view a personalized timetable



03

## Usability Goals & Key Measurements

## Usability Goals and Key Measurements

### 1) Efficiency

- **Rationale:** The website should help students complete tasks quickly to streamline course registration.
- **Measurement:** Number of clicks needed to complete core tasks like generating or exporting a timetable.

### 2) Ease of Use

- **Rationale:** Students should quickly understand and use the website without frustration.
- **Measurement:** Time taken (in seconds) to upload an Excel file and generate a timetable.



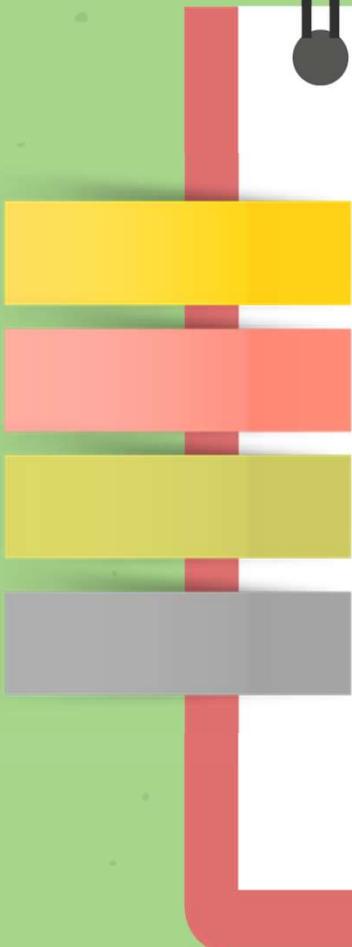
# Progress Towards Usability Goals

## 1) Efficiency

- Reorganize sections to help users work more efficiently.
- Break tasks into separate pages, completing each task within its respective page.
- In Development: An "Album" feature to save and recall previous timetables (optional).

## 2) Ease of Use

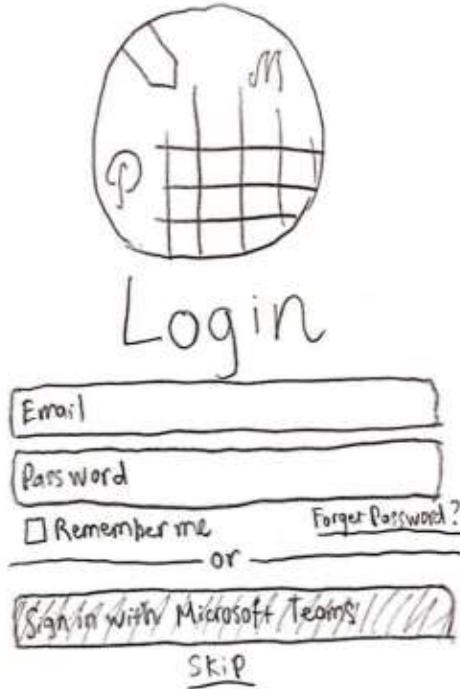
- Redesign button placements for better visibility and readability.
- Use clear, obvious labels for sections and buttons to ensure instant understanding.



04

# Revised Interface Sketches

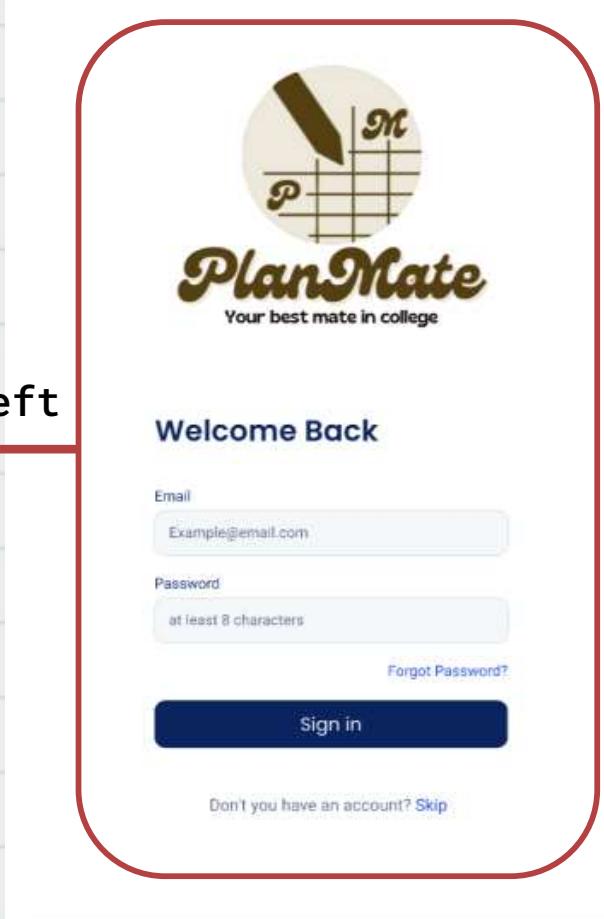
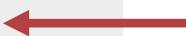
## Change 1: Login Page



Before

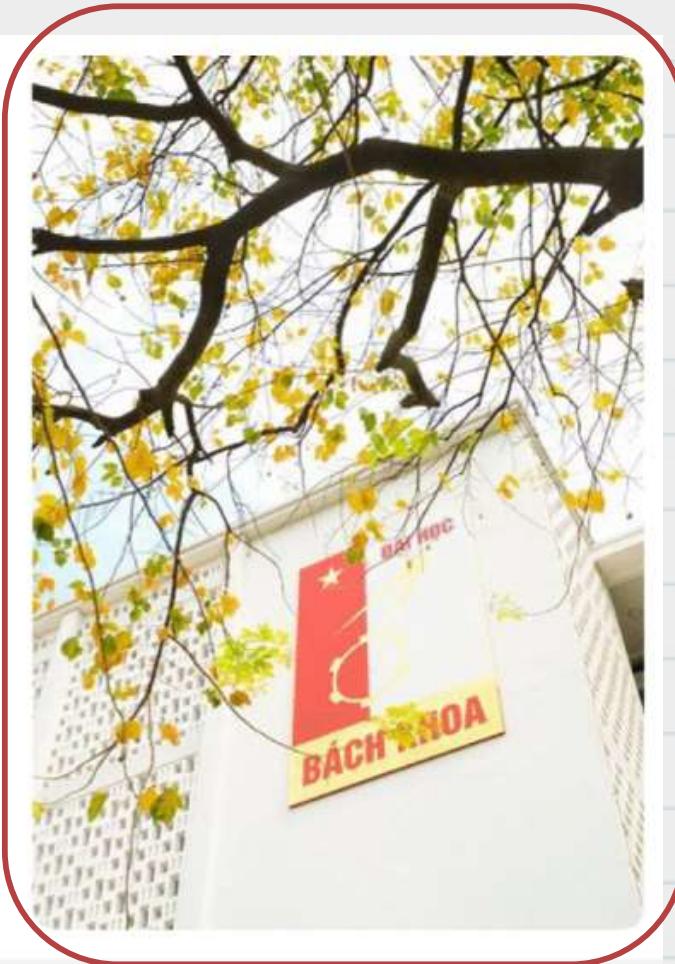
# Change 1: Login Page

Move to the left



The original PlanMate login page features a logo with a pen and a grid, followed by the text "PlanMate" and "Your best mate in college". Below this is a "Welcome Back" message. There are two input fields: "Email" containing "Example@email.com" and "Password" with the placeholder "at least 8 characters". A "Forgot Password?" link and a blue "Sign in" button are also present. At the bottom, there's a link for users without an account: "Don't you have an account? Skip".

New!



After

# Change 1: Login Page

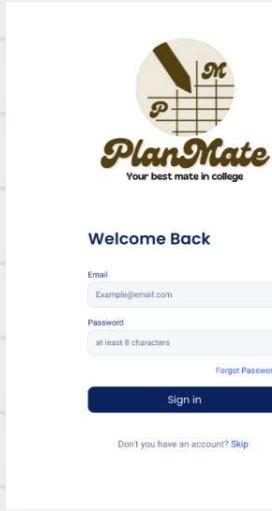
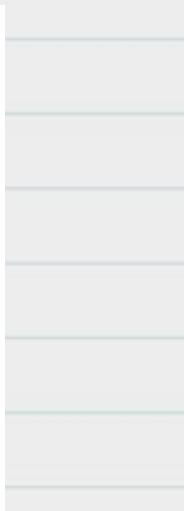
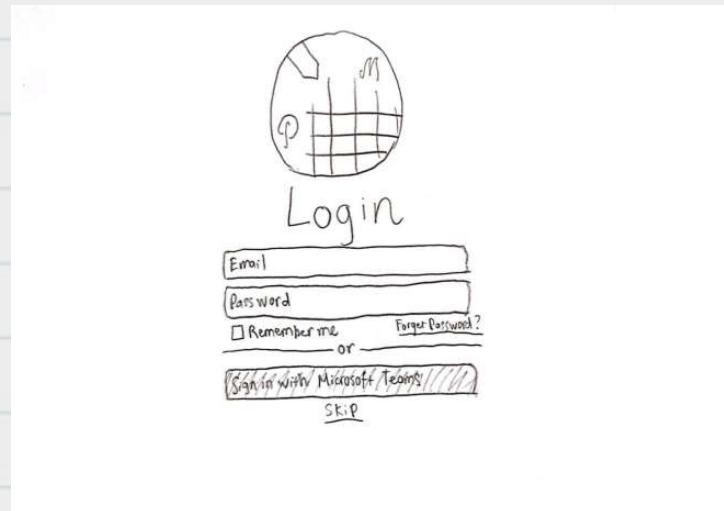
## Changes

- Move the login box to the left

To create a more balanced layout and ensure better visual flow, improving user experience.

- Add an image of HUST campus to the right

Increases brand recognition and creates a more familiar and engaging environment for users.



## Change 2: Timetable/Schedule Page

A hand-drawn sketch of a web-based Timetable/Schedule Page. The interface includes:

- Top navigation bar with a logo icon, "Export", "Map", and "Share" buttons.
- User information: "abcd@sis.hust.edu.vn" and "Logout?".
- Main title: "TIMETABLE SCHEDULE".
- Import feature: "Import Excel file".
- Study Program selection: "Standard", "Elitech", and "SIE".
- Course search: "Course" input field with a magnifying glass icon.
- Save button: "Save".
- Auto Schedule button.
- Course grid: A 6x7 grid where the first column is labeled "Course" and the columns represent days from Monday to Saturday.
- Preference section: "Preference" and "Absent" buttons, followed by a 6x2 grid for marking preferences for each day of the week.

Course	Mon	Tue	Wed	Thu	Fri	Sat

	Mor	After
Mon	<input type="checkbox"/>	<input type="checkbox"/>
Tue	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wed	<input type="checkbox"/>	<input type="checkbox"/>
Thu	<input type="checkbox"/>	<input type="checkbox"/>
Fri	<input type="checkbox"/>	<input type="checkbox"/>
Sat	<input type="checkbox"/>	<input type="checkbox"/>

Before

## Change 2: Timetable/Schedule Page

The screenshot shows the Timetable/Schedule page with several UI changes highlighted by red annotations:

- Move to the left:** A red arrow points to the "Course Selected" and "Class Course Detail" sections, which have been moved to the left side of the page.
- Rearrange buttons:** A red box encloses the "Preference Absent" checkbox group and the "Auto Generate" and "Save Timetable" buttons, indicating they have been rearranged.
- Move to the right:** A red arrow points to the large "TIMETABLE SCHEDULE" grid, which has been moved to the right side of the page.

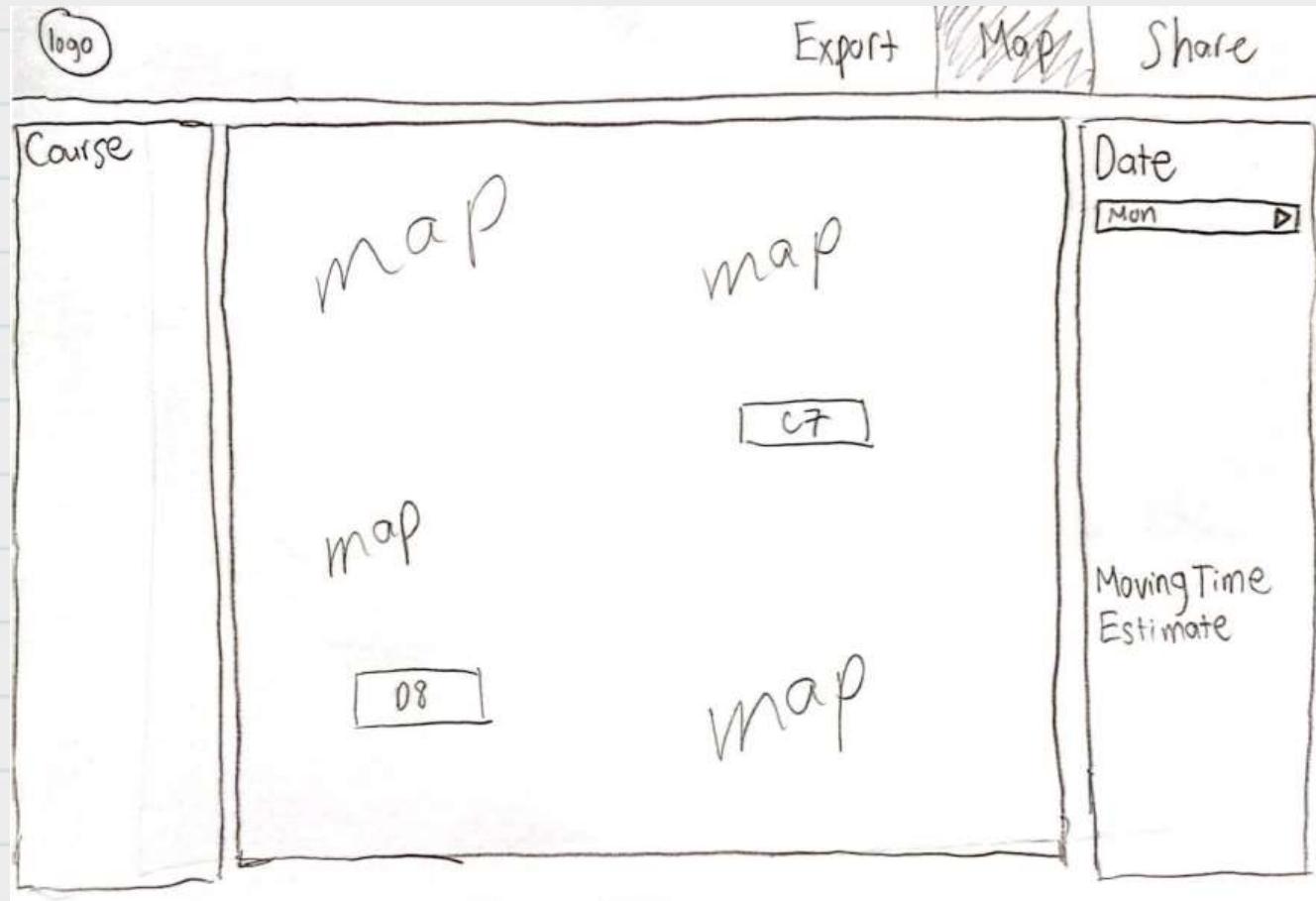
**After**

## Change 2: Timetable/Schedule Page

### Changes

- Add a "Schedule" page button (instead of using the logo)  
Provides clearer navigation and makes it easier to return to the schedule.
- Move the "Upload File" and "Search Course" sections to the left  
Creates a more organized layout and improves accessibility.
- Move the "Preferences" section to the left and adjust checkbox options  
Improves readability by separating options, making it more user-friendly.
- Reorganize the "Auto Generate" and "Save" buttons close together  
Enhances efficiency by grouping key actions for quicker completion.
- Shift the timetable slightly to the right  
Creates a balanced, natural visual flow after layout adjustments.
- Add a button/tab for the profile instead of email/logout in the corner  
Improves accessibility to profile and logout options, enhancing navigation.

## Change 3: Map Page



Before

# Change 3: Map Page

Move to the left  
Change into checkboxes

The screenshot shows a university map page with several interface changes highlighted by red arrows and boxes:

- Day Check:** A section on the left containing a list of days with checkboxes. An arrow points from the text "Move to the left" to this section.
- Class Course Detail:** A section listing courses with checkboxes. An arrow points from the text "Change into checkboxes" to this section.
- Map:** The central part of the page is a detailed campus map showing buildings, roads, and landmarks. An arrow points from the text "Move to the right" to this area.
- Location:** A section at the bottom left showing the distance and estimated time to travel between two locations (From: D8 Building, To: D8 Building). An arrow points from the text "Separate from the 'Day Check' box" to this section.
- Moving Time Estimate:** A section at the bottom right showing walking, biking, and driving times. An arrow points from the text "Move down here" to this section.

After

Move to the right

Separate from the "Day Check" box  
Move down here

## Change 3: Map Page

### Changes

- Move "Day Check" to the left and replace the dropdown with checkboxes

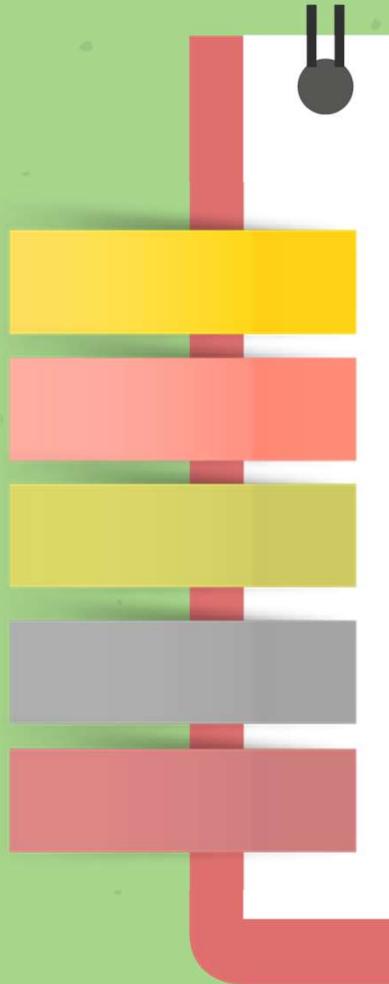
Synchronizes with the course schedule selection, making it more intuitive and consistent.

- Separate "Moving Time Estimate" from "Day Check" and move it to the bottom, adding extra details

Improves clarity by isolating time estimates and providing additional information for better planning.

- Shift the map to the right

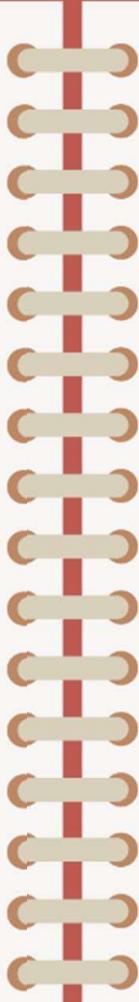
Creates a more balanced layout after rearranging the elements.



05

## Me-fi Task Flows

## 3 Task Flows



### Simple Task

Export the personalized timetable to a PDF

### Moderate Task

View the campus map with class locations

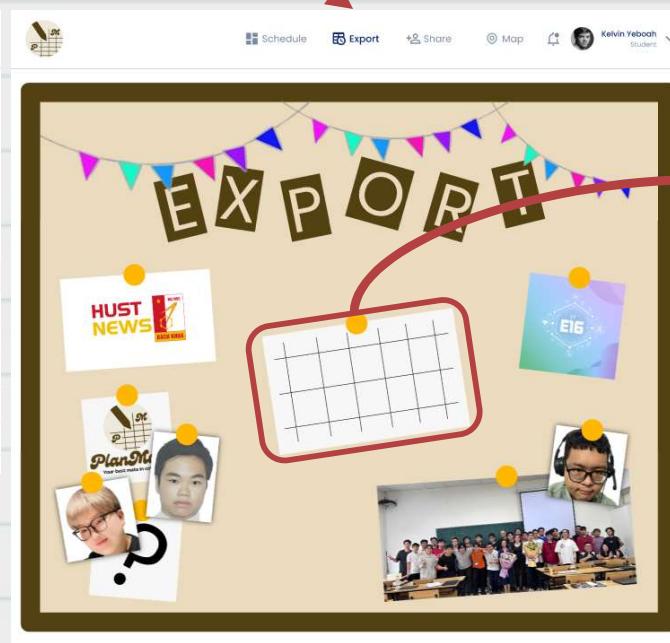
### Complex Task

Automatically generate and view a personalized timetable

# Simple Task Flow

Export the personalized timetable to a PDF

This screenshot shows the 'TIMETABLE SCHEDULE' section. It includes a sidebar for selecting courses like 'Physics I'. At the top, there's an 'Export' button highlighted with a red box. Below it are sections for 'Preference Absent' and 'Auto Generate'.



This screenshot shows the 'TIMETABLE SCHEDULE PREVIEW' page. It displays a weekly grid from Monday to Sunday with time slots from 8 AM to 5 PM. At the bottom, there are three buttons: 'Download' (highlighted with a red box), 'Print', and 'Send to my email'.

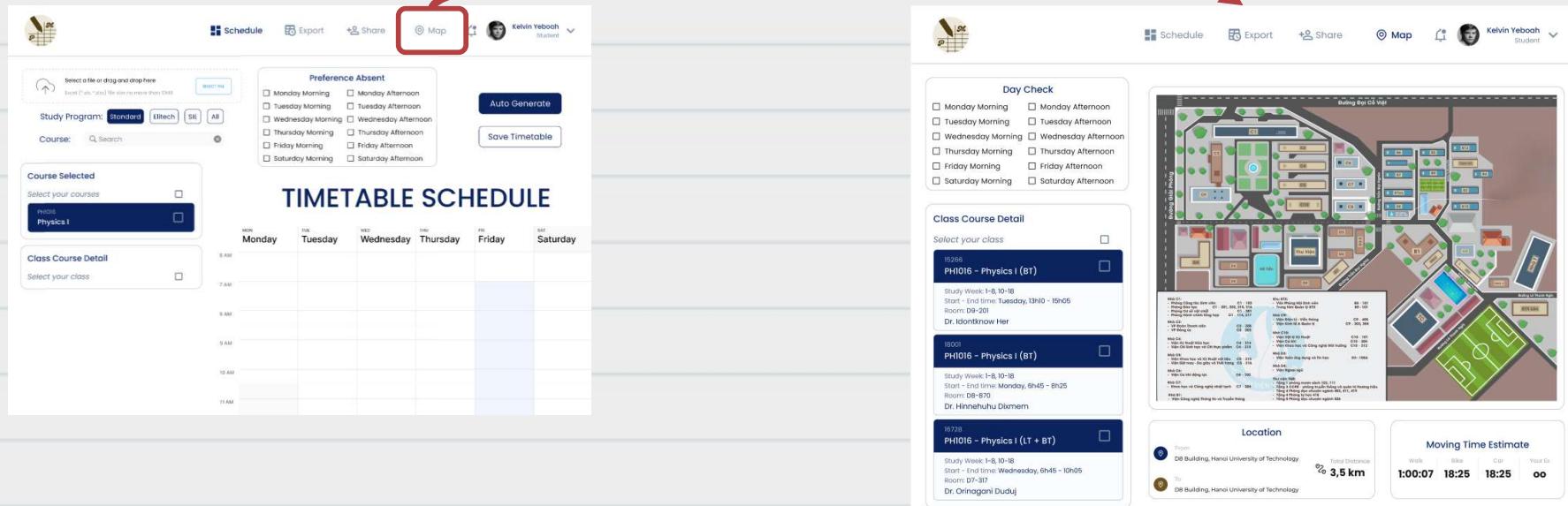
[Click “Export” tab]

[Click the picture of the timetable]

[Click “Download” button]

# Moderate Task Flow [1]

**View the campus map  
with class locations**



[Click “Map” tab]

# Moderate Task Flow (2)

View the campus map with class locations

The figure consists of three side-by-side screenshots of a university course search application interface. Each screenshot shows a campus map at the top with various buildings and green spaces. Below the map are sections for 'Day Check' (checkboxes for Monday through Saturday Morning and Afternoon), 'Class Course Detail' (list of courses with descriptions and checkboxes), 'Location' (dropdowns for 'From' and 'To' buildings), and 'Moving Time Estimate' (distance, time, and mode of transport).

- Screenshot 1:** The 'Day Check' section is highlighted with a red border. It shows checkboxes for all days and times.
- Screenshot 2:** The 'Class Course Detail' section is highlighted with a red border. It lists three physics courses (PH1016, PH1015, PH1016) with their details and checkboxes.
- Screenshot 3:** The entire rightmost screenshot is highlighted with a large red border, encompassing the 'Day Check', 'Class Course Detail', 'Location', and 'Moving Time Estimate' sections.

[Choose wanted days in  
“Day Check” checkboxes]

[Choose wanted courses  
to see the classes]

[The map displays the  
classes and estimate  
moving time shows up]

# Complex Task Flow [1]

Automatically generate and view a personalized timetable

The image displays two side-by-side screenshots of a web-based timetabling application interface.

**Left Screenshot:** A user has uploaded an Excel file named "Imported Timetable.xlsx" to the "Select a file or drag and drop here" input field. The "Imported Timetable.xlsx" file size is 10MB. Below the file upload area, there are study program filters: Standard, Elitech, SIE, and All. A "Course" search bar is present. A red box highlights the "Imported Timetable.xlsx" file preview and its associated file size. The main section is titled "TIMETABLE SCHEDULE" and shows a grid from Monday to Saturday at 6 AM to 11 AM.

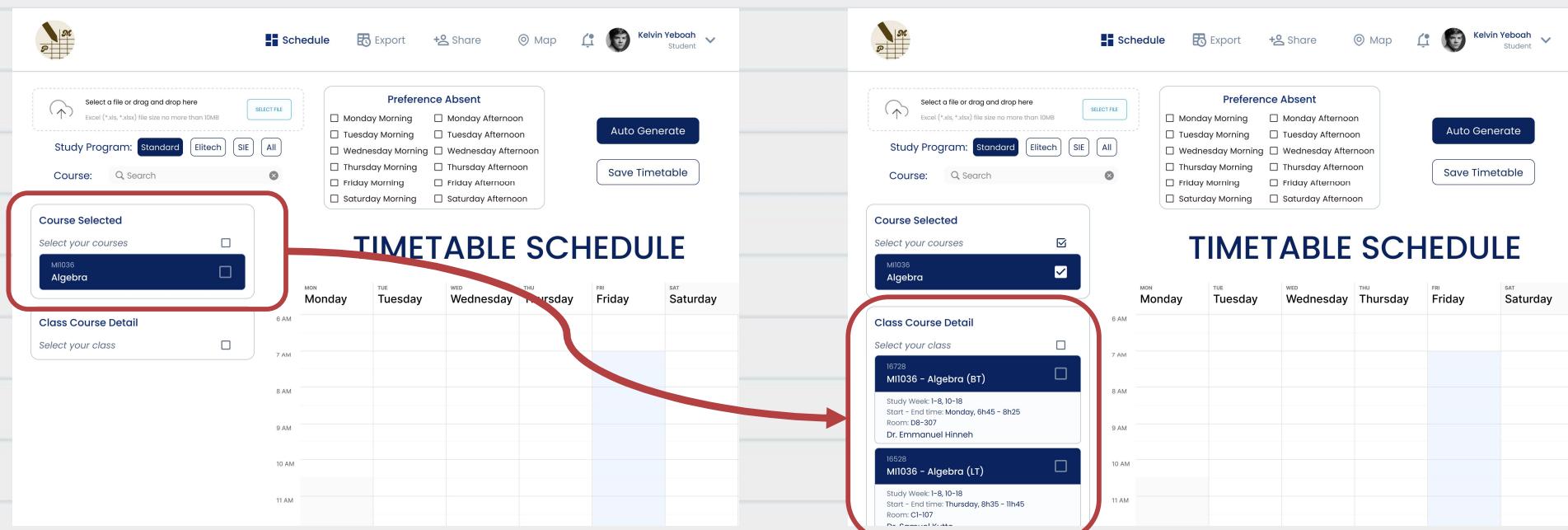
**Right Screenshot:** The user has selected the "Standard" study program and searched for the course "Mathematics". A red box highlights the "Course" search bar. The main section is titled "TIMETABLE SCHEDULE" and shows the same grid as the left screenshot.

[Click to import Excel file]

[Check the Study Program and Search for the course's name]

# Complex Task Flow (2)

Automatically generate and view a personalized timetable



[Choose the course to show more information]

[The details of the classes of that course show up]

# Complex Task Flow (3)

Automatically generate and view a personalized timetable

The figure consists of three vertically stacked screenshots of a web-based timetable scheduler, likely from a university's student portal. Each screenshot shows a user interface with several sections:

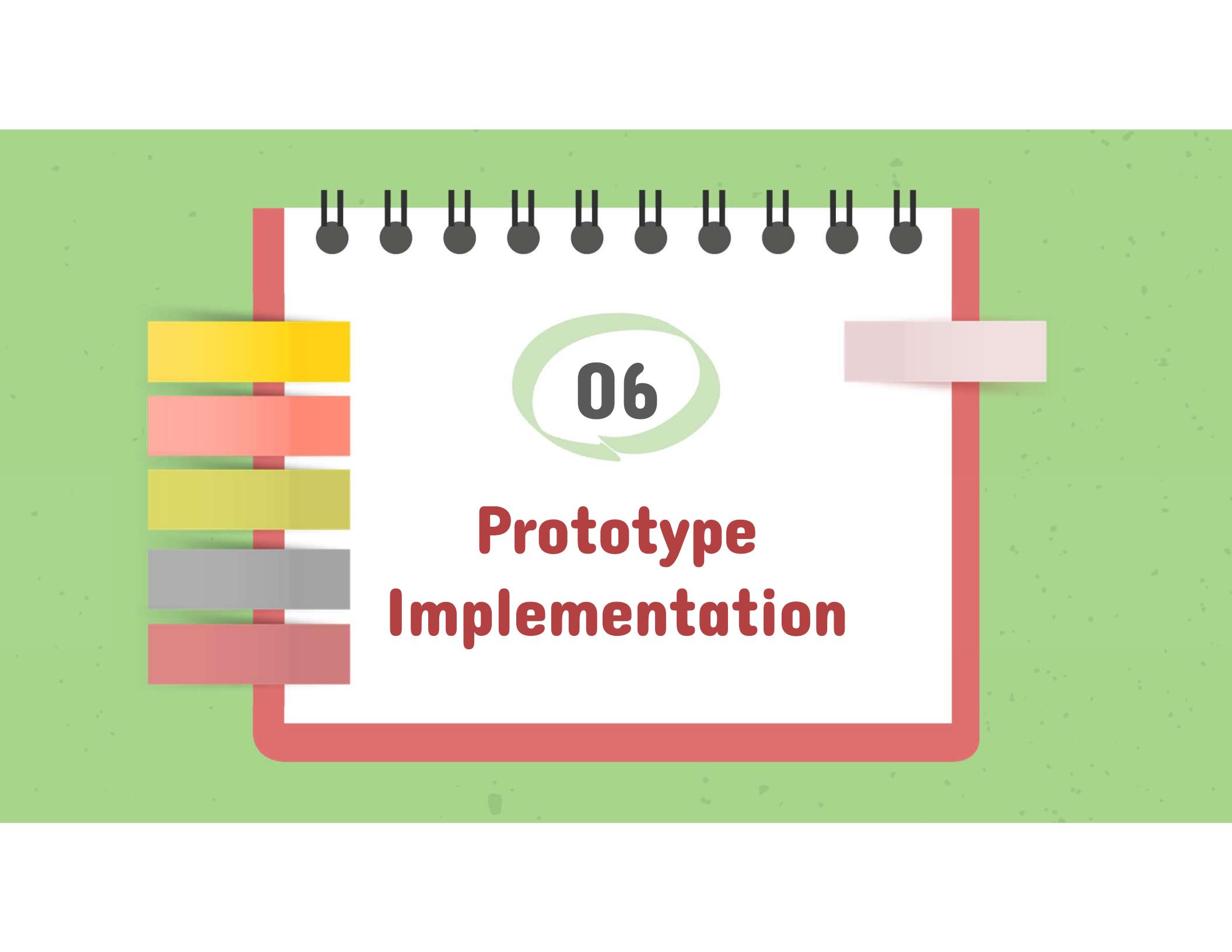
- Top Section:** Includes a file upload area ("Select a file or drag and drop here"), "Study Program" dropdown (Standard, Elitech, SIE, All), "Course" search bar, and a "Preference Absent" checkbox group (Monday Morning, Monday Afternoon, Tuesday Morning, Tuesday Afternoon, etc.). A red box highlights this section.
- Middle Section:** Shows a "Course Selected" dropdown set to "M0035 Algebra" (with a checked checkbox) and a "Class Course Detail" section for "M0035 - Algebra (BT)" with study week details (Study Week: 1-8, 10-18; Start: Monday, 0845 - 0925; Room: D6-207; Dr. Emmanuel Hinneh). Another red box highlights the "Auto Generate" button.
- Bottom Section:** Displays a "TIMETABLE SCHEDULE" grid for the week (Monday-Saturday) from 8 AM to 11 AM. The grid shows various class slots. A third red box highlights the generated timetable grid.

[Check the boxes from the “Preference Absent” checkboxes]

[Click on the “Auto Generate” button]

[The timetable automatically schedules, also the chosen class is checked]

P/S: Remember to click “Save Timetable” for further uses!



06

# Prototype Implementation

## Design And Prototyping Tools

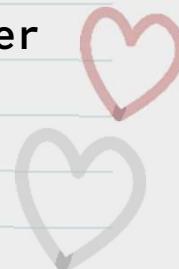


### Pros

- **Collaborative:** Real-time feedback and team collaboration.
- **Interactive:** Create clickable prototypes for testing.
- **User-Friendly:** Easy to design and prototype without advanced skills.
- **Cloud-Based:** Accessible from anywhere, enabling remote work.

### Cons

- **Limited Interactivity:** Can't fully simulate advanced user flows.
- **Performance:** Large files may slow down.
- **Not Fully Realistic:** Doesn't replicate the full app experience.



## **Limitations And Trade-offs**



- **No Specific User Profiles:** Lacks personalized user data or profiles.
- **Incomplete Button Implementation:** Some buttons are not fully functional, limiting interactions.
- **Limited Search and Import Features:** Search and import course functions are not fully developed.
- **Incomplete Map Functionality:** The map does not display all locations or features yet.
- **Limited Testing Scenarios:** User flows and behaviors can't be fully tested as the prototype is not fully interactive.

## Wizard-of-Oz



- **Course Search:** Manually simulate the search results when users input a query, even if the search function isn't fully implemented.
- **Timetable Generation:** Simulate automatic timetable creation by manually arranging courses, as the algorithm for auto-generating the timetable isn't active yet.
- **Map Functionality:** The map is incomplete, simulate location-based actions, like showing the classroom locations, manually selecting from pre-defined spots on the map.
- **Save/Load Timetable:** When users try to save or load timetables, simulate the action manually, even if backend storage isn't implemented yet.



## Hard-Coded Items

- **Predefined Timetable Layout:** The layout for the timetable is fixed, with pre-set courses and schedule structure that users can view but not interact with dynamically.
- **Fixed Course List:** The list of courses that users can choose from might be static, with no real-time updates or personalized course options.
- **Static Preferences:** Preferences such as days or times for courses may be hard-coded into the interface, with limited options and no dynamic customization.
- **Map Display:** The map is likely to show fixed locations, such as buildings, but does not dynamically update or adjust based on user input or the courses selected.

Thanks  
For  
Listening!

From:  
Group 3

PlanMate

Thank

# APPENDIX

tening!

From:  
Group 3

Plagiarate

# Me-fi Prototype



**Have a try!**

