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COMMUNITY APP

Web applications with C# project

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Author's declaration of originality

I hereby certify that I am the sole author of this project and this project has not been presented for examination or submitted for defence anywhere else. All used materials, references to the literature and work of others have been cited.

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Abstract

The thesis is written in English and contains [pages] pages of text, [chapters] chapters, [figures] figures and [tables] tables.

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1. Introduction

Community is an application that addresses several issues in academic life. The main focus is to provide a simple and effective tool for students to aid them in their journey, also to tackle some pain points of faculty members that are either forced or willingly chose to teach students.

Nowadays, students are facing more problems caused by digitalization, which can be simply put that student life is starting to suck. Physical attendance had a drastic drop especially after covid pandemic and the growing accessibility to all the learning materials and lecture recordings being online. The former being actually a blessing, in some cases it can lead to various problems e.g. students falling behind and not completing their studies, teaching faculty members having absolutely no idea on how the information is received and whether they need to emphasize something before its too late because peak physical attendance at lectures is capped at 5 students out of 100 declarations, students that experience first time self-management, faculty members overburden that they cannot help every single one who declared their course etc.

In the previous days, where recordings were taboo and physical attendance was important, students used to tackle these issues by plain communication among eachother. Either gathering in hallways, study rooms or library to have knowledge sharing sessions. Community application provides solution in bringing that back with being able to create study session events under tasks or join others that already created them. Study session events are based on running course assignments which is an ideal scenario even for those from open university that do not have a specific class that they share most of their coursework with. These types of events also alleviate overburden of teaching faculty members because students would take the initiative of helping eachother out in their own hands. It is undeniable fact that in order to learn something well, one should try teaching it to others. Community application would greatly aid in providing the platform for students to practice just that.

On top of that, the platform would provide easy KPI-s to track the studies based on time tracked under the assignments without the need to use any third-party software. Students would see their assignments, deadlines and everything necessary not to fall behind and assess their situation based on statistics and not just their assumptions. When users see

the metrics on how much one still has to go and how much time one has to put into subjects to achieve the points, the reality hits them in the face. Overview with metrics will dissipate the illusion of having all the time in the world and minimise students falling into the Student Syndrome at the end of each semester.

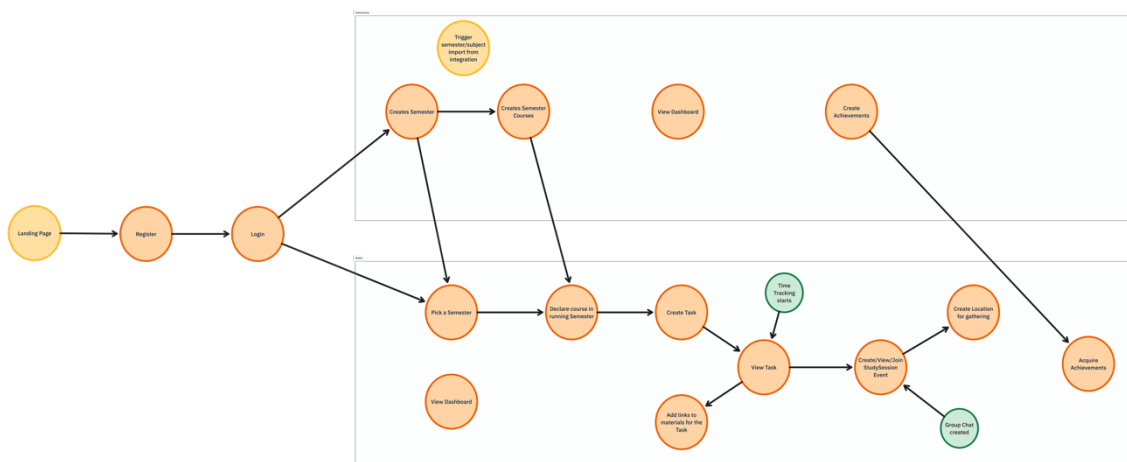
Furthermore, the data of actual time spent and how big time and effort it takes to complete one's courses and assignments, it would be highly valuable for lecturers to plan their coursework more efficiently. Community would provide actual feedback on the time and effort spent on assignments and where students fell for a need for study groups because they did not grasp the material as efficiently as it was assumed. Regarding old student feedbacks, those are highly subjective and untrustworthy since these are filled once at the end of semester and most of the students want to just get it out of their way. Community app metrics would provide so much more precise and up-to-date overview of the situation; thus, it would allow to react proactively during the semester whenever lecturers unintentionally overload or underexplain some complex topics.

Gamification factors like shooting confetti on marking to-do list items as done, seeing the progress metrics surge and getting badges on completing achievements will motivate students to keep track of their studies. Since dropout rates among men are higher than in women, adding the gamification factor could lead to a higher completion rate. The workload visibility and organisational part might be more appealing for women; thus, the percentage of both genders should increase. For more competitive people, they would be able to compare their progress to other peers on the leaderboard. In the future, adding some prizes for student events like tickets or other merch to boost studies even more.

Community app definitely is not a silver bullet for all problems, but it is a great attempt in nudging academic family into collaboration to form a community or to make everybody actually feel it more.

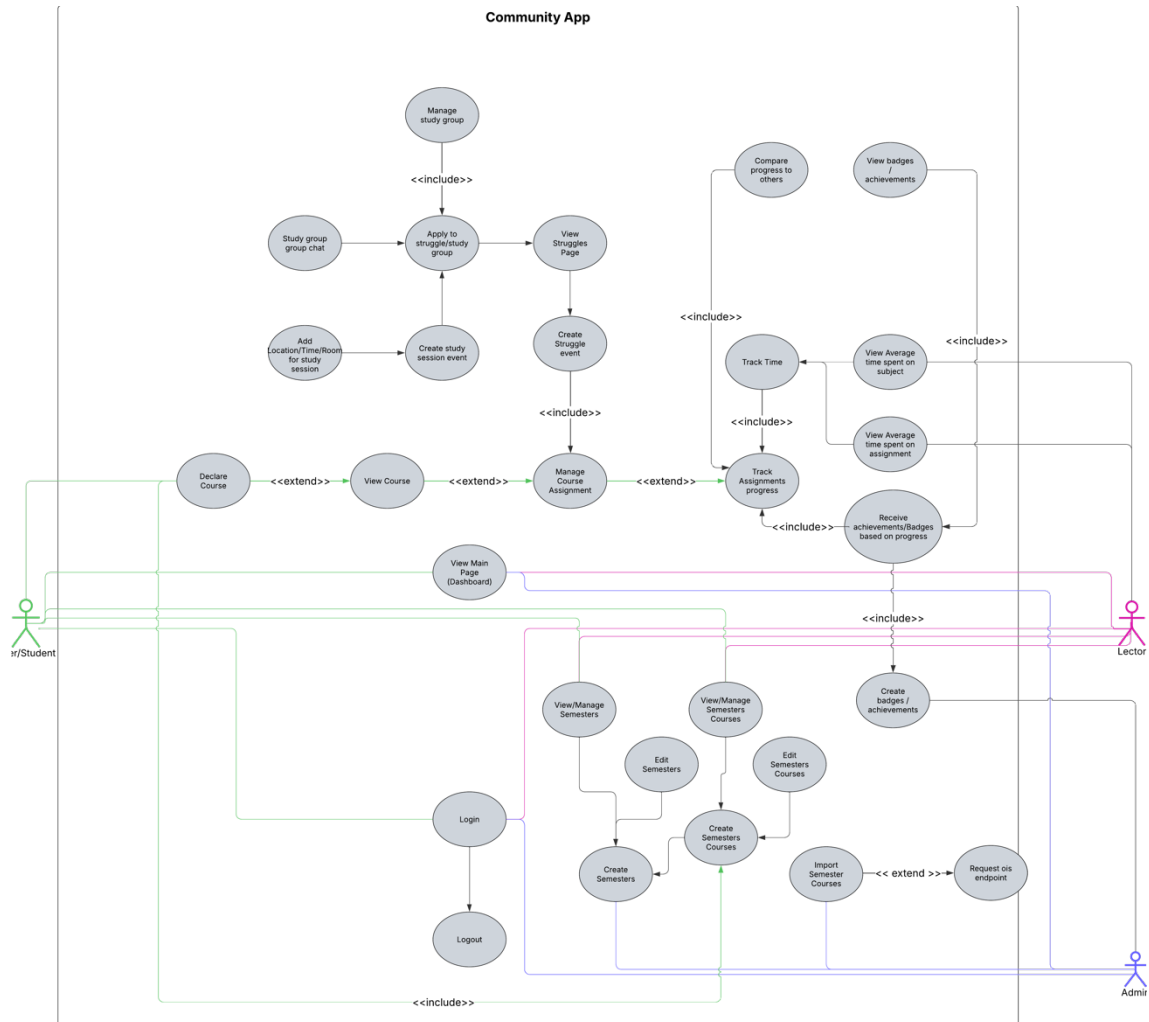
2. Concept

This graph is custom interpretation of a concept map. The purpose of it is to identify relationships between MVP functionalities and how the users would use it. This way, I could address the main concerns of the users that would use the app and visualize conceptually what would their journey be like, before I jump in to designing wireframes for UI and ERD for the database. I went for this kind of derivative of concept map approach because concept maps are highly personalized and provide opportunity to organize everything in a way that makes the most sense to an individual creating the concept map.



3. Use Case Diagram

After the concept diagram, the use case diagram was necessary to dive deeper into users' possible interactions with the system. Use case diagram was an ideal option to depict this graphically.



4. Wireframe

1. Login Page

Sign in

New user? [Create new account](#)

Continue

Or

SSO Option 1

SSO Option 2

2. Register Page

Register

Email

Password

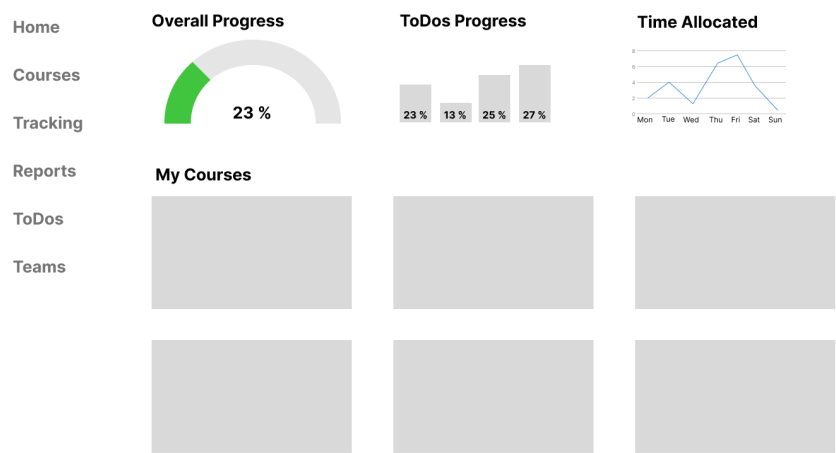
Sign Up

Or

SSO Option 1

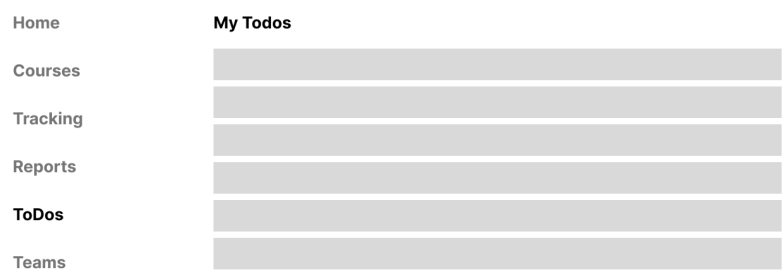
SSO Option 2

3. Main page



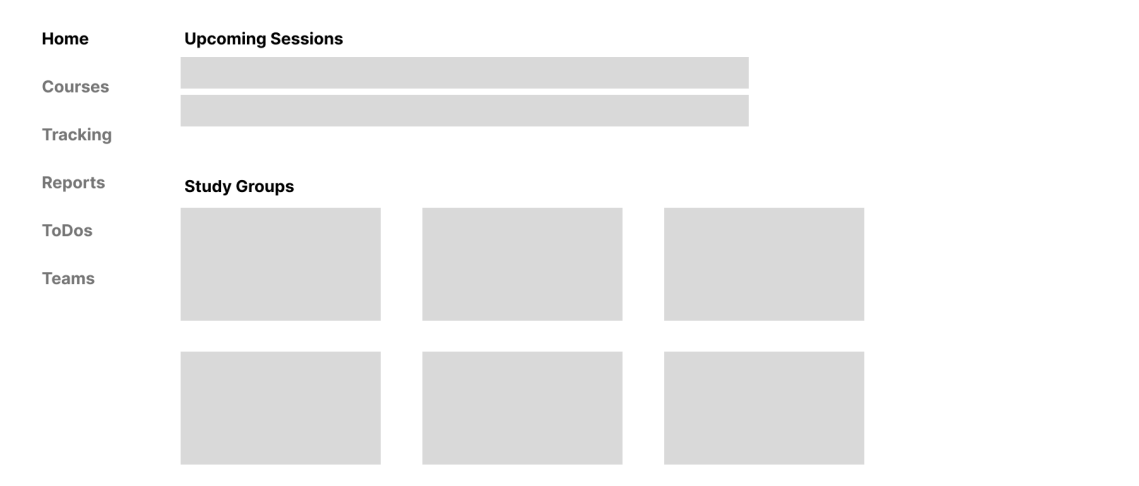
Ideally I want the main view to show a dashboard of the necessary running metrics and a view of active courses so a user can quickly resume work on whatever is necessary.

4. Tasks page



Time tracking page will look similarly. You can edit ToDo list items and study sessions similarly.

5. Groups



In teams you can see the upcoming study sessions and chat and keep track of group activites.

5. ERD Model

