



Bilkent University

Department of Computer Engineering

Senior Design Project

StudyB

Project Specification Report

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1. Introduction

Studying during university life is very crucial to success. Either studying alone or with a group is an option but getting help from other students is a contribution to this success. But unfortunately, this

1.1 Description

Our project aims to provide a platform where willing students can find study partners, share course materials and thus help each other. Thanks to StudyB, students will be able to get together after confirming that they are Bilkent students through their bilkent emails. On the course pages, students will be able to share course materials such as course notes and questions and will be able to answer and help each other. Students who are looking for a study partner will be able to create study rooms and will be able to work together with the people who enrolled in these rooms, either face-to-face or in a virtual environment.

There will be a scoring system to encourage students' cooperation and prevent lurkers. After a 2-week trial period, members who do not participate in any way but benefit from the materials of other people on the platform will be removed from the platform. Also a score system is developed according to the amount of participation which will have scoreboards according to the wishes of the users. Among the members who want to show their participation amounts in the score table, the most participating member will appear on the scoreboard of course page as the master of that course.

In addition, according to the courses students have enrolled, system will have their exam schedules and information, and they will be notified when the exam dates are approaching.

1.2 Constraints

1.2.1 General Constraints

- ☐ StudyB will be a free application on the mobile platform.
- ☐ The application is for Bilkent students.
- ☐ The project will be completed in May 2020.
- ☐ The application's language will be English.

1.2.2 Implementation Constraints

- ❑ StudyB is an Android-based application.
- ❑ Java Script, AngularJS will be used in the implementation step.
- ❑ The project will be developed on Github which all group members have as a change to access the platform.
- ❑ StudyB creates its dataset from STARS platform.

1.2.3 Security Constraints

- ❑ The application will require a university email address (ug.bilkent.edu.tr) from student to sign up to the system. This information will not be public and it will be saved the application database.
- ❑ StudyB will require a nickname to access to the platform. The users create their nicknames which can be anything(name, number, etc). This will be public and other students will see this nickname. However, if the students want to hide their information. They can choose the hide button and the system will give a random number instead of their nickname.

1.2.4 Sustainability Constraints

- ❑ Application code will be well commented and efficient.
- ❑ Application documentation will be well organized for updates.
- ❑ StudyB's main goal is to help students to find their study partners and study materials. According to their feedback, we need to maintain the application.

1.2.4 Sustainability Constraints

- ❑ Application code will be well commented and efficient.
- ❑ Application documentation will be well organized for updates.
- ❑ StudyB's main goal is to help students to find their study partners and study materials. According to their feedback, it is really important for us to maintain the application.

1.3 Professional and Ethical Issues

In order to make StudyB's features as effective as possible; users' Bilkent emails, courses, exam dates, attended study rooms, activities on the platform and messages they send to each other and study rooms will be stored in the database. This information will not be shared and saved only for the developer team to the purpose of developing StudyB better for users. StudyB just show related material to students. It is not showing other material.

2. Requirements

2.1 Functional Requirements

- ☐ Users will create an account with their Bilkent webmail accounts (with the ug.bilkent.edu.tr extension).
- ☐ Users will select the specific department and course of Bilkent University that they want to enroll in.
- ☐ Users are going to be directed to the main page of the selected course.
- ☐ Users can make comments on the posts on the main page.
- ☐ Users can ask questions about the course.
- ☐ Users can share documents such as pdf's, images, etc. about the midterms, quizzes, homework, etc. on the main page of the course.
- ☐ Users can take general and exam tips for their assigned courses as a notification. If they do not want to take, they can make this feature disable from settings.
- ☐ Users can enroll the study buddy feature by clicking a button on the main page.
- ☐ Users can start a new conversation with their study buddy in a chat room.
- ☐ According to the users activities, ascorelist will be created to identify lurkers and students who contribute most.
- ☐ Top three contributor students are going to be seen on the score list and the top student is going to be called as the master of that course.
- ☐ If users do not want to be seen in the score list, she/he can make her/his nickname invisible in the list.
- ☐ Lurkers can be identified from this score list if they do not contribute for a month and after that, they will be in the suspension period as a punishment.

2.2 Non-Functional Requirements

2.2.1 Usability

StudyB will have a minimalist user interface therefore it will be easy to use and learn. Users will sign in with their Bilkent webmail accounts.

Google calendar can be integrated to the account if the user prefers to follow midterms, finals.

2.2.2 Reliability

StudyB should protect the files that are shared among users and the files should be available all the time in application.

StudyB should be used any time and should avoid any crash.

2.2.3 Scalability

StudyB will be used in only Bilkent University for now. Undergraduates are going to be able to assign to the application. Database should be scalable for at least the number of students in Bilkent University and should support dynamical changing of the users.

2.2.4 Privacy

User information will be private including their email address and private messages between two users. Also, if the user desires, nicknames will be unseen and a random number will be shown as nickname to other users.

3. References

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