



SRS - Software Requirement Specification document for the mobile app My Study Life

Software Quality Assurance (Montreat College)



MONTREAL
COLLEGE IT

Software Requirement Specification of

MY STUDY LIFE (Android Mobile App)

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Abstract

This final year report is intended to fulfill the requirements in order to qualify for the diploma in *Software Testing & Quality Assurance*. This report evaluates a planning and organizing mobile application, called **My Study Life**. It provides all the quality requirement specifications, scope, features, modules, and validations of the application, that form a major sub-category of requirements, define a broad set system-wide attributes such as functionality, performance, usability and scalability. This report is going to be treated as a detailed specifications and requirements documentation to develop testing plans and perform testing later on for the mobile application.

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1. Introduction

My Study Life is a free online planner for students, teachers and lecturers designed to make your study life easier to manage.

My Study Life is a cross-platform planner for students, teachers and lecturers designed to make your study life easier to manage. *My Study Life* allows you to store your classes, homework and exams in the cloud making it available on any device, wherever you are.

Unlike a paper planner or school diary, *My Study Life* integrates all areas of your academic life - see homework due and overdue for classes, classes which conflict with your exams and even add revision tasks for a specific exam - all in a free, easy to use application. Far from your standard calendar, *My Study Life* is optimized to work for your school life right from the start with support for week and day rotation schedules. Add your classes and view them in a beautiful, instantly identifiable, familiar week view.

My Study Life seamlessly syncs your data between devices, allowing you to use the app even when offline. You can add a task on the move from your phone or tablet and it will be instantly available on the web application.

This application is available for Android, iPhone, and Window devices as well as for web, but for the sake of this project report, I will be planning and executing tests only on an Android mobile device.

1.1. Purpose

My Study Life is a planning and organizing application which is used for organizing classes, tasks and exams.

Some of the essential features of *My Study Life* are as follow:

Track Tasks

Store your tasks -- homework, assignments, reminders, and revision -- with ease in the cloud, that can be accessible from anywhere.

Store Exams

Store all your important exams alongside your classes and revision tasks.

Manage your classes

Supporting day and week rotation timetables, advanced academic year/term support and integration into tasks.

Notifications

It notifies you with reminders for unfinished tasks, upcoming exams and classes before they take place.

1.2. Intended Audience

This application is intended for students and teachers of any academic level. It is used to organize and plan the classes, exams, assignments, revisions and so forth. It has features like **Academic Years/Terms** where the intended users can store their subjects and therefore classes, tasks and exams being visible between a start and end date you set. This way the semester system can also be entertained.

College and university level students and teachers can use this application for their annual, biannual/semester classes rotations, days rotations and even week rotations. Since all the data is synchronized on web servers, the users don't need to worry about data loss in case of device change or malfunctioning of any sort.

1.3. Scope

My Study Life is a planning and organizing mobile application. Unlike most school timetables, *My Study Life* also manage your classes and exams together with scheduling, tasks, reminders, and syncing.

This application supports both week and day rotation schedules as well as timetables which repeat every week. *My Study Life* also lets you assign a class to an academic year, and also to it's terms and specify custom start/end dates if needed. *Holidays* feature of this software lets you see which days you have off, and also shift rotation schedules.

1.4. References

<https://www.mystudylife.com/>

[https://play.google.com/store/apps/details?
id=com.virblue.mystudylife&hl=en](https://play.google.com/store/apps/details?id=com.virblue.mystudylife&hl=en)

2. Overall Description

2.1. Product Perspective

My Study Life is supposed to be a scheduling and planning application. It has mobile versions as well as web versions available. This product provides simple mechanisms for users to plan and organize tasks.

2.2. Product Features

The following are the main features that are included in *My Study Life*:

- User account
- Sign up
- Timetable
- Tasks
- Exams
- Settings
- Search
- Reminders

2.3. User Characteristics

It is considered that the user do have the basic knowledge of operating smart phone device and have access to the internet.

2.4. Operating Environment

My Study Life is available in both web and mobile platforms. Is is operating in the following operating environments:

- Android
- iOS
- Windows Mobile

- Windows 8

2.5. Dependencies

This software highly depends on type of version of browser and/or mobile operating system being installed. Browser version should be used which have HTML5 support. Android 8+ version should be used. Windows 8+ operating system is supported. iOS 10+ version should be used.

2.6. Design and Implementation Constraints

This application is provisioned to be built on the Hybrid framework which is highly flexible. The data on this software is being constantly updated by millions of users worldwide. Decision regarding which database to use should be taken considering the fact that data being exchanged or stored is large, and the appropriate data management system will yield efficient performance.

3. System Features & Requirements

3.1. System Features

Sign Up

User can sign up directly for *My Study Life* using their Facebook, Google or Office 365 account. If user do not have a Facebook, Google or Office 365 account or would prefer to create an account manually, they can do on the [sign up page](#).

User will be asked whether they are a student or teacher and to provide or confirm their details.

If they created an account manually, they'll be sent an email to verify they're human; simply by clicking the activation link in the email and their account will be activated.

Subjects

A subject or course is used to group your classes, tasks and exams together. The subject consists of a name and color, in order to make the subject distinguishable across the application.

If you are only taking the subject for a short period of time, such as over a single term or year, you may assign the subject a year or term. Any classes assigned to this subject will only repeat during the year or term specified by the subject, unless assigned a term beneath the subject's year or start/end dates.

Classes

Also known as lessons, classes in *My Study Life* can be a one-off event (such as an extra revision session for Computing) or a recurring event with multiple occurrences. Once the class has been created its type cannot be changed.

A class belongs to a subject and may optionally have a module, room, building and teacher.

One-off Classes

A one-off class occurs once and only once on the specified date and time. It must have a start and end time as well as a date on which it occurs.

Recurring Classes

A recurring class can have multiple times and will repeat between either:

- The start/end dates of the assigned academic year or term.
- The start/end dates assigned to the class, if specified.

When adding or editing a task, My Study Life will tell you how long your class repeats for when you create a new, or edit an existing class.

A recurring class must have at least one time. A time may have one or more weekdays or rotation days. Rotation schedules are configured when adding or updating the [academic years](#). A single class may have multiple times which occur on both weekdays and rotation days allowing for complex timetables.

If the class only repeats for a finite amount of time (less than an academic year or term), you can use the start/end dates of the class to specify this. The start/end dates assigned to a class will override any dates from a year or term so long as they are within the assigned year or term's dates.

Tasks

Tasks in *My Study Life* allow you to track your homework, assignments, revision and set general reminders.

A task belongs to a subject and must have a type (Assignment, Reminder or Revision), a title and a date on which the task is due. You may also add extra information to the task using the detail field (such as the number of questions to complete or a specific area to investigate for an essay).

For example, if you had been given an assignment to write an essay about Moore's Law for Computing to complete by the 20th April, you would create a task giving it the subject Computing, type of Assignment, due date of 20th April and a title of Moore's Law Essay. You could use the detail field to add some references to helpful articles online, or some pointers given to you by your teacher.

Revision Tasks

A revision task is a specialized type of a task which allows you to assign the task to an [exam](#). My Study Life allows you to create and track the

progress of a number of revisions tasks for a single exam. These tasks are also shown when viewing an exam, reminding you that you may still have some revision left to do. This means that when revising for that all important end of year exam, you can create a revision task per module (or even sub-module) to ensure you're 100% prepared.

Exams

My Study Life allows you to add your exams to appear alongside your classes in your timetable. It will also warn you of any classes which conflict with the exam and lets you track your revision progress using revision tasks.

An exam belongs to a subject and must have a date, start time and duration. All other fields such as module, seat and room are optional.

Academic Years, Terms and Holidays

An academic year and its terms are used to represent your school year and any terms (semesters, trimesters, quarters etc.) that you may have. Both years and terms have start end dates and are used to constrain a class to repeat between those start and end dates.

Depending on your school system, your classes may be consistent throughout the school year or they may change on a term-by-term basis. If, for example, your school system uses semesters, you should create an academic year with two terms.

Scheduling

Academic years also control how your classes repeat. When creating an academic year, you will be asked if your schedule is fixed or rotates on a week or day basis.

Holidays

Also known as vacations or days off, holidays allow you to specify dates on which you do not have classes. If you have a rotation schedule, you can also use holidays to push rotation weeks or days.

For example, if you have a 2 week rotation timetable and a holiday that lasts a week. The week before the holiday is week 1. When checked the "pushes schedule" would mean the week after the holiday would be the alternate week (week 2) whereas when unchecked it would be the same week as before the holiday (week 1).

Timetable

User should see the option to add an academic year. An academic year represents a school year (e.g. September 2015 – July 2016) and its terms are used to segment that school year. When creating an academic year user can tell *My Study Life* how their schedule works (fixed, week or day rotation). You can [read more about academic years and terms here](#).

After you've added an academic year, you can add your classes and holidays. When adding a class, you'll also need to create a subject for it to belong to. If you're unfamiliar with the term "subject" you can think of it like a course or project which your classes, tasks and exams belong to. You can [learn more about subjects here](#).

When creating [classes](#), they are automatically assigned to the year/term that was selected when you tapped the "New Class" button. At the top of the class input screen, *My Study Life* will tell you how long the class will repeat in your timetable for. In addition to assigning the class to a year or term, you can also set start/end dates for a class. This is useful when you have a class that only lasts a few weeks within a year or term.

You can also add [holidays](#) to an academic year. Holidays prevent your classes repeating during the dates of the holiday (meaning no reminders on mobile devices), although you can still add one-off classes during holidays. If you have configured the academic year to use either a week or day rotation schedule you can also optionally push your schedule using holidays.

A Day Rotation

My Study Life supports between 2 and 10 days of rotation and also allows you to add classes which occur on both a rotation day and weekday. You can configure week rotation timetables when adding or editing an [academic year](#).

From the general settings screen, you can choose whether you would like the weeks to be displayed as numbers or letters.

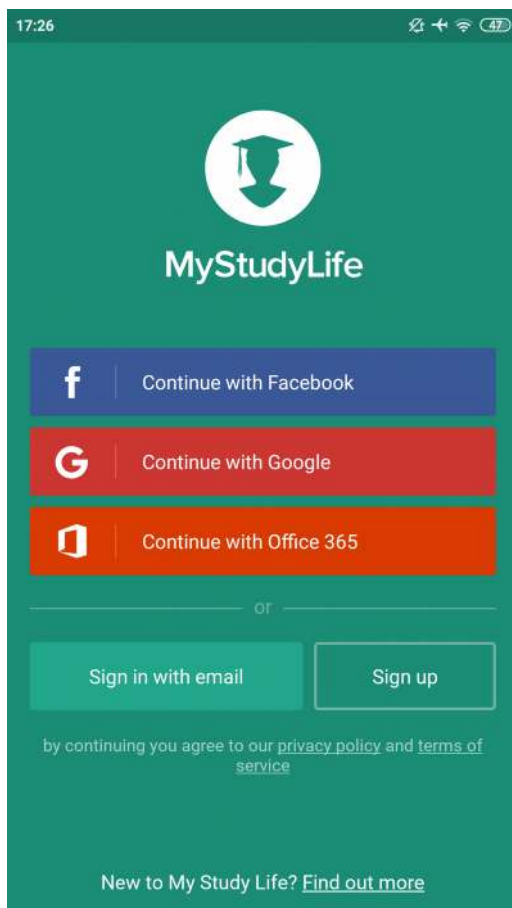
A Week Rotation

My Study Life supports between 2 and 4 weeks of rotation so whether you have a more traditional two week timetable or your classes only occur every 4 weeks your timetable will work with *My Study Life*. You can configure week rotation timetables when adding or editing an [academic year](#).

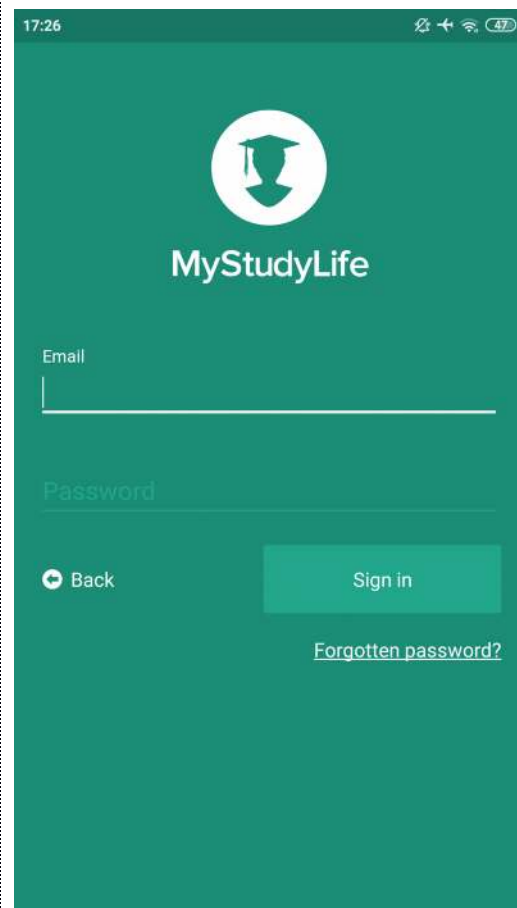
From the general settings screen, you can choose whether you would like the weeks to be displayed as numbers or letters.

Some of the Screenshots of the mobile application are as follows:

Sign Up

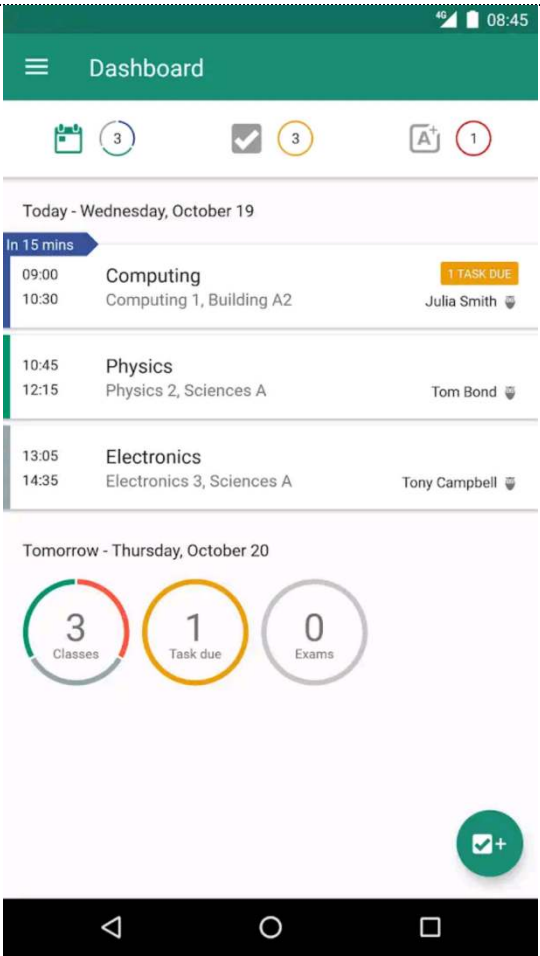


Login

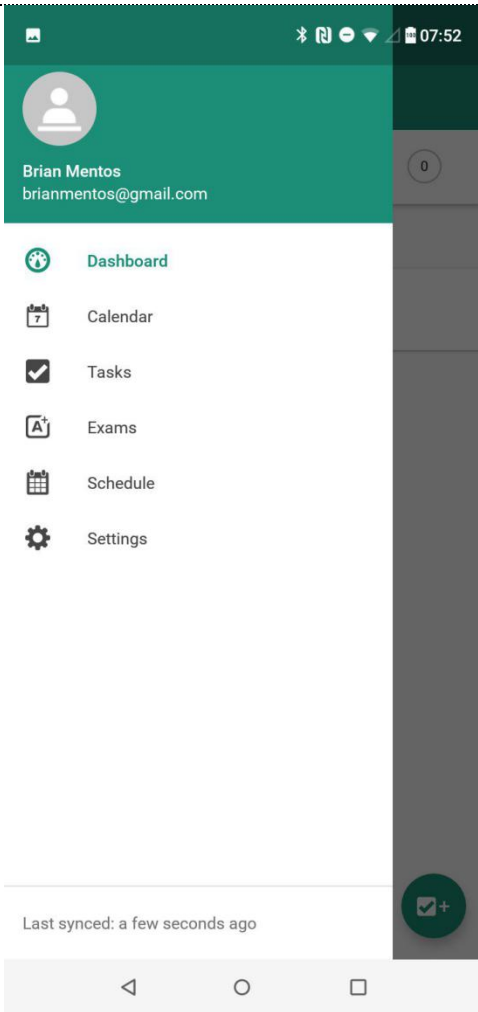


Dashboard

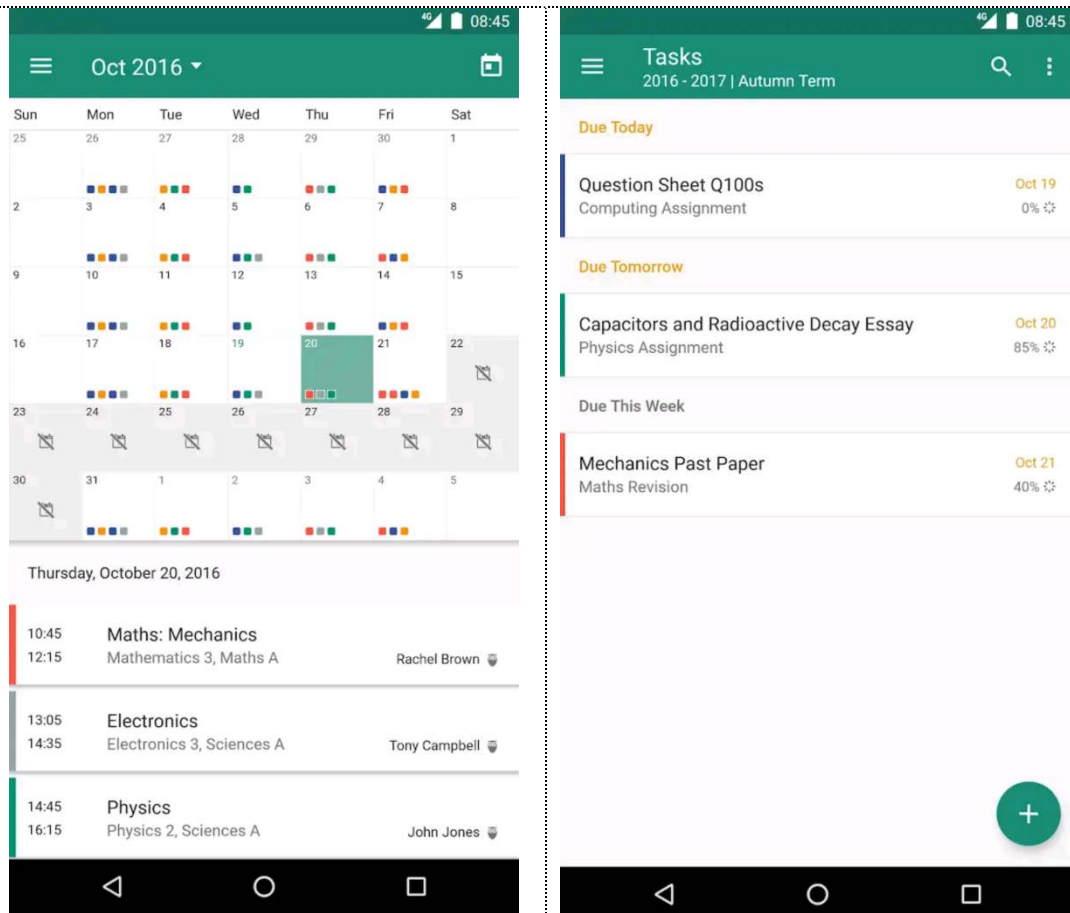
Menu



Calendar



Tasks



Exams

18:01

Exams
2020 - 2021

Later This Month

Software Testing Exam
09:00 Friday, 31 July

120 min

+

Add Class

New Class
2019

SUBJECT

Module

Room
F23

Building

Teacher

Repeats

NEW TIME

Add start/end dates?

7

1 2 3 4 5 6 7 8 9 0

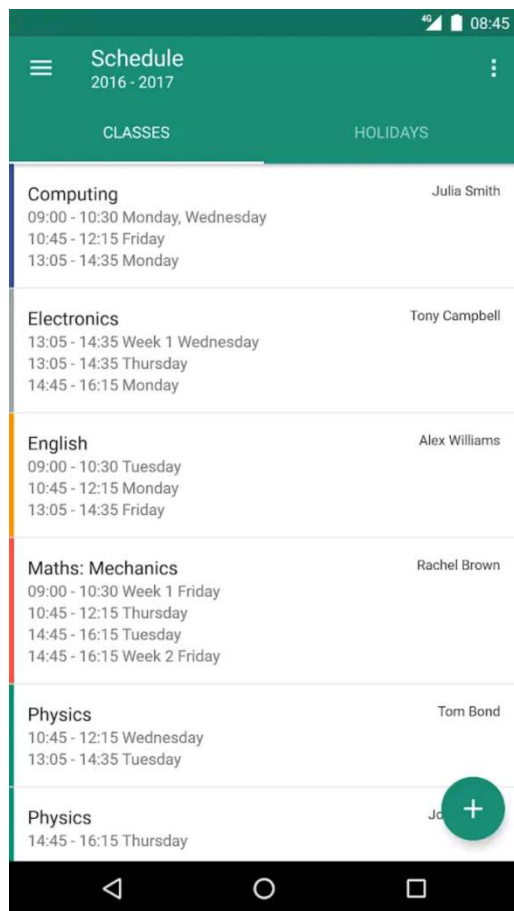
@ # \$ % & * + () /

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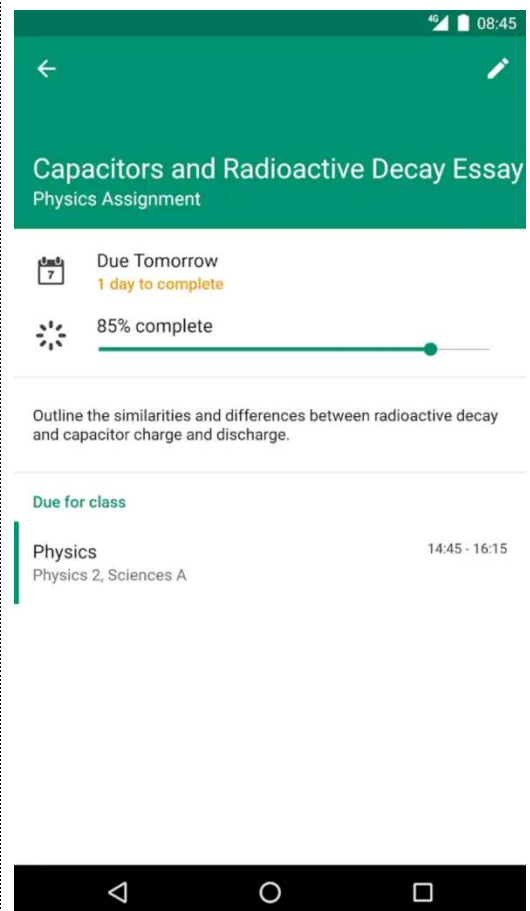
ABC , 12 34 EN + ES

EN + ES

Schedule



Reminder



3.2. Functional Requirements

Modules	Functional Requirements
Sign Up	<ul style="list-style-type: none"> User can sign up using their Facebook account User can sign up using their Google account User can sign up using their Office 365 account User can sign up by tapping on sign up button using their email account
Sign In	<ul style="list-style-type: none"> User can sign in using their Facebook account User can sign in using their Google account User can sign in using their Office 365 account User can sign in by tapping on "Sign in with email"
New User	<ul style="list-style-type: none"> User can enter their school year tenure User can submit school start date User can submit school start time
Dashboard	<ul style="list-style-type: none"> User can view their upcoming and current tasks, classes, exams and reminders User can add new task from dashboard by tapping on "New Task" User can view Menu from dashboard
Menu	<ul style="list-style-type: none"> Username and email address on top of menu split screen Dashboard Calendar Tasks Exams Schedule Settings
Calendar	<ul style="list-style-type: none"> User can view Calendar with respect to either Week or Month by tapping on the drop down menu User can view all the tasks, exams, classes in the calendar with their details Upon tapping on a particular date user can view detailed

	<p>descriptions in the bottom screen section</p> <ul style="list-style-type: none"> User can jump to current date by tapping on the calendar icon on the top right corner of the screen
Tasks	<ul style="list-style-type: none"> User can view all the current and upcoming tasks on the Tasks window User can Filter the tasks by tapping on the task at the top of the screen. Filter fields are in terms of School Year or School Term and in terms of Subject User can Search a task by tapping on the search icon on the top of the screen User can view Past Tasks by tapping on a three-dotted menu widget on the top right corner of the screen User can create a New Task by tapping on the Add Icon in the bottom right corner of the screen
New Tasks	<ul style="list-style-type: none"> User can select a Subject from Subject drop-down menu User can also add a new subject from the Subject drop-down menu User can choose the type of the task from the drop-down menu. Choices are: Assignment, Reminder, Revision User can select a date by tapping on the Date field, and selecting the date from the popped-up calendar User can add the Title of the task User can enter Details about the Task in the Detail field In case of a Revision Task, user can also select the Exam for which the Revision is for After filling all the fields user can Save their task by tapping on "Save" If the user wishes not to save the task, they can tap on Close. A message box should pop-up for confirmation of discarding the task
Exams	<ul style="list-style-type: none"> User can view their Exams from the Exam screen User can apply Filter to view Exams in terms of School Year/Term or Subject User can also view Past Exams by tapping on screen menu User can tap on the listed Exam to view details in a new screen User can add New Exam by tapping on Add
New Exam	<ul style="list-style-type: none"> User can set Academic Year/Term to add the exam for

	<ul style="list-style-type: none"> • User can add a new academic year/term to add the exam • User can select subject from a drop-down menu or can add a new subject • User can enter Module • User can add date and time for exam • User can set Duration of exam • User can enter their Seat number • User can enter their Room number • User can check box on Resit if they are giving the exam again • User can save all the data by tapping on Save • User can discard all the changes by tapping on close
Exam View	<ul style="list-style-type: none"> • User can see all the details of the Exam in this module • Users can Edit the details by tapping on Edit
Schedule	<ul style="list-style-type: none"> • User can view on their Class Schedule and Holidays Schedule in the main screen of this module • User can filter their view by Academic Year/Term or Current • User can Edit Academic Year by tapping on three-dotted menu • User can add New Academic Year • User can manage Subjects • User can Add New Class by tapping on Add
New Class	<ul style="list-style-type: none"> • User can select Year/Term or add a new Year/Term • User can select Subject from drop-down box • User can add Module name • User can add Classroom number • User can mention building name • User can add their Teacher Name • User can select if their class Repeats or Does not repeat • User can add Time and Duration of their Class • User can enter Start and End dates of their Class • User can either Save or Discard their changes
New/Edit Academic Year	<ul style="list-style-type: none"> • User can Edit Start and End date of the Academic Year • User can select Scheduling options: Classes occur on the same day every week, Weekly rotations, Daily rotations • User can Add a New Term • User can either Save or Discard their changes

New Academic Term	<ul style="list-style-type: none"> • User can enter Term Name • User can select start and end dates of the Term • User can either Save or Discard their changes
New/Edit Subject	<ul style="list-style-type: none"> • User can change the Academic Year/Term of their Subjects • User can delete their subjects • User can add or make changes to the Subject Name • User can make changes to the Subject Color • User can either Save or Discard their changes
Settings	<ul style="list-style-type: none"> • General Settings • Reminders • Feedback & Support • Privacy Policy • Terms of Use • Sign Out
General Settings	<ul style="list-style-type: none"> • Set First day of the week: Sunday, Monday, Saturday • Show rotation schedules as: Numbers, Letters • Set default start time • Set default duration
Reminders	<ul style="list-style-type: none"> • Set on or off • Set class reminders • Set Exam reminders • Set Task reminders to on/off
Sign Out	<ul style="list-style-type: none"> • User signs out of the application

3.3. Non-Functional Requirements

Performance

The system must be interactive and the updates must be fast. So, in every action-response of the system, there are no immediate delays. In case of adding or changing tasks, classes or exams the changes made must appear seamless and immediate. Also connecting to user accounts shouldn't take more than 2 seconds.

Scalability

The app should be able to adopt itself to increased usage or able to handle more data as time progress. When the user data increases app should be capable of handling them without delay by optimizing the way storage is done and accessed.

Responsiveness

The application should be responsive to the user input or to any external interrupt which is of highest priority and return back to same state.

Usability

User should be able to understand the flow of app easily, that is users should be able to use the app without any guideline or help from manuals.

Reliability

The application should be reliable to perform the business, i.e when user perform some action it should be acknowledged with confirmation.

Availability

The user can access the application to install and look for regular updates and give feedback from Google Play store.

Screen Adaption

The application should be able to render it's layout to different screen sizes, along with automatic adjustment of font size and image rendering

Network Coverage

The app should be able to look out for WiFi, if it's not available then it should automatically switch to mobile network.

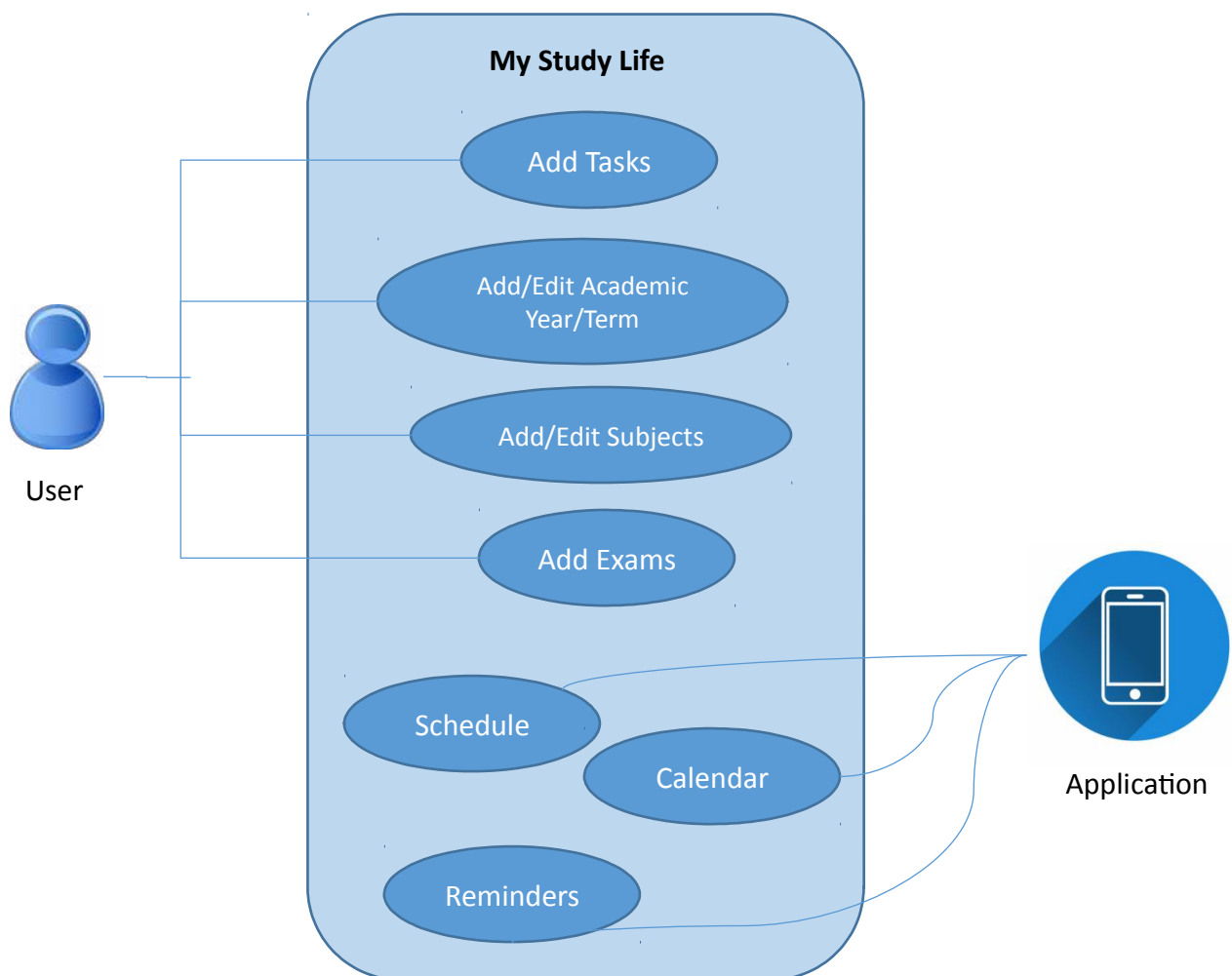
4. Functional & Business Validations

No.	Modules	Properties	Validations
1	Install Application	APK file	<ul style="list-style-type: none"> Successful Installation
2	Sign Up	<ul style="list-style-type: none"> Facebook Google Office 365 Email Address 	<ul style="list-style-type: none"> Direct sign up from Facebook, Google, or Office 365 Sign up manually usually email address Verify and validate email address and password Verify if the user is student or teacher Validate personal details
3	Sign in	<ul style="list-style-type: none"> Email address Password 	<ul style="list-style-type: none"> Verify validate email address Validate password Show errors in case of invalid fields
4	Academic Year/Term	<ul style="list-style-type: none"> Start of academic year/term End of academic year/term Name of Term 	<ul style="list-style-type: none"> Required Set start and end date with a standard calendar Ask for scheduling Add and update academic year/term
5	Subject	<ul style="list-style-type: none"> Subject Name Subject Color Year/Term 	<ul style="list-style-type: none"> Required Show in red for empty or incorrect fields
6	Class	<ul style="list-style-type: none"> Subject Module Room Building 	<ul style="list-style-type: none"> Required Error message shown in red if fields are missing or

		<ul style="list-style-type: none">• Teacher• Repeats• Time• Start/end dates	<ul style="list-style-type: none">• incomplete• Unique
7	Holiday	<ul style="list-style-type: none">• Name• Start/end dates	<ul style="list-style-type: none">• Required• Error message shown in red color• Unique
8	Exam	<ul style="list-style-type: none">• Subject Name• Date• Time• Seat• Room• Resit	<ul style="list-style-type: none">• Unique• Error message shown in red color

5. List of Diagrams

5.1. Use Case Diagram



5.2. Data Flow Diagram

