B19CSE045
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SOFTWARE ENGINEERING
Assignment: Software Requirement Specification Document

Project: Productive Daily Schedule Manager
        (GROUP PROJECT OF B19CSE045 AND B19CSE039)

PREFACE :
- Goals are just dreams with deadlines.The basic principle of keeping a deadline for your own tasks and achieving them is a great journey to a path called success.
- Meanwhile, one needs to free the mind from tasks that are of little value/ importance so the mind can focus on what's really important.
- Upon thinking of this real life scenario , we came up with a solution through the means of software application that eases the work of the human mind.
- This is our Software Requirement Specification Document which lists out all the detailed information regarding its clear design features and what the application performs.

1.INTRODUCTION:
   1.a Context:
   - As students ourselves we picked out a problem that we face daily in our lives and how the existing solutions are overcomplicated.
   - This document contains all the information and the specification of the software project.
   - The document provides the important functionalities and features and it also explains about its simple interface.
   - The document provides detailed information about the functional requirements too.
   - It also explains about the different software requirements, workflow and various constraints.

   1.b Problem Specification:
   - As college students , many of us face difficulties in keeping track of money spent and makes us wonder about how money is spent in a swift manner.
   - The existing expense managers are either too complex or too simple like a

basic notes application.
- Hence, we decided to make an application of the appropriate complexity which makes users feel comfortable while using the app.

1.c Scope of the document:
- The scope of the document describes the application and the people who would be benefited after using the application.
- The software is specifically designed for those who need to keep track of their expenses and gain knowledge of how their money is spent on what things.
- The application is capable of setting reminders to users just before their deadlines.
- The application is designed to keep its functionalities simple and hence tries to be a small part of the mobile phone with huge benefits.

1.d Summary/overview of the document and its structure:
This document contains all the important features , functionalities that the product focuses on fulfilling the needs of the stakeholders , and lists out what the app is capable of and why one needs to use the app.This also explains about the various constraints and design features too.It also explains on how the application tries using minimal memory during runtime.

2. General Description:
2.a Workflow:
Workflow plays a vital role in making sure that the project is completed within the estimated time.Therefore, the project is divided into several subproblems with the help of a gantt chart.
Several phases of the projects are created in sequential order.
- Timeline to identify the project
- Design for the application
- Coding for the application
- Bug identification and fixing
- Deploying the application

2.b Use-cases/ User Scenarios:
- Setting up reminders/deadlines: Users have an option to set up a reminder for their custom made deadlines.
- Authentication: Username and password is required to keep log of all the

activities (Gmail Authentication) and is the key to backup the data without misplacement.

- Expenses : Expenses can be managed through entering the amount spent with the title entered on what the money was spent on.In this way, the application keeps track about the dates at which certain money was spent and provides a weekly graph that displays money spent via comparison.
- Diary Entries: A Diary entry can be managed through entering the content of data and a custom date date and time selection feature is provided to make it more flexible according to the user's needs.This also provides option to edit the existing entry.
- Reminders: Reminders can be added with a deadline date and time provided.The user can frequently check the current week's/ all week's reminders under the reminders section.Under a Reminder Task, there is also subTask (an optional feature that is enabled just in case the user wants to add subtask to an existing task).
- Stakeholders Involved : Development Team, Designer Team, Testing Team , user end,Maintenance Team and Database Team.

2.c Overall description of the software product:
- The aim of the application is to provide a platform where the users can remind themselves about the important daily tasks they really keep forgetting.
- It also provides a diary with user authentication security to write about and look back at the things that they have done in the past.
- Day to day expenses can be noted with the expense manager feature provided with a bar graph to show the weekly comparisons on how much money is spent on a relative week basis.

3. FUNCTIONAL REQUIREMENT:

- The user should be able to choose a custom date,time,month and a year if he wants to.To achieve this, a calendar is made use of.When the user remembers the time where he needed to add an expense report in the past or edit some parts of his diary ,This necessity plays an important role.

4. INTERFACE REQUIREMENTS:

- The GUI should be clear and simple so that the user doesn't have to spend his time in understanding the application.The buttons (which play a major role in mobile app development) should be easily visible and evenly spaced with appropriate colours that don't strain the human eye.

- Given that the application should be easy and simple to handle in a variety of dimensions of mobile phones, The application should be made available to all the android phones.

5. PERFORMANCE REQUIREMENTS:

- Incase of android mobile phones, there are a variety of software versions available.It includes low-level APIs such as Jelly Bean (API 16 – 18) and the latest version Android 11 (API 30).The newer versions are better to perform than the others in terms of runtime memory usage and loading duration of a new Widget.But when the application is deployed to all the users around the world, the application is expected to perform well even on low-level APIs as a lot of users may still use older versions of Android phones.

- The application should be thoroughly checked for all bugs and fixes are to be made immediately incase of any , to prevent crashing of the application.

6. DESIGN CONSTRAINTS:
- The application has to be designed to handle data in an efficient manner.

- The memory used during the runtime has to be minimized.

- The user should be allowed to switch between applications without losing progress in the current application.

- Display only the most relevant information at a time.The user must feel comfortable at navigating between different features available on the application.

7.NON-FUNCTIONAL REQUIREMENTS :

● Non-functional Requirements specifies the quality attribute of a software
   system.Software systems are evaluated based on factors such as performance,
   maintainability,security, reliability, scalability, usability etc…

MEASURES TAKEN :
   ● Performance : Different features are provided with individual classes to
      break down the complexity and minimum number of variables shall be
      used in the application and minimize the run-time memory and improve
      the performance.

8.SCHEDULE AND BUDGET ESTIMATES :
   ● In accordance with the gantt chart provided for the application, there are
   various phases and various requirements needed to complete application's
   development within the timeline.
   ● Design phase :
      ○ March 25,2021 - March 31,2021 ~ 6 Days.
      ○ ₹500/day => Total = ₹3000
   ● Implementation and coding   (Includes Frontend and Backend)   ,
   Authentication and login :
      ○ Apr 7,2021 - Apr 23,2021 ~ 16 Days.
      ○ ₹1000/day => Total = ₹16000
   ● Bug Fixing + Removal :
      ○ Apr 23,2021 -Apr 27,2021 ~ 4 Days.
      ○ ₹2000 in Total.
   ● Deployment on play store and AppStore:
      ○ PlayStore : One-time developer fee (USD $25) ~ ₹1,814.72.
      ○ Total Deployment cost : ₹8999.91 ~ ₹9000.
   ● Total budget estimate : ₹30,000