

SOFTWARE REQUIREMENT SPECIFICATION FOR SMART-REMINDER

JOMEESH JOSE

RMCA B

ROLL NO: 3

1. INTRODUCTION

The prime focus of this application is to have a notifying system which calls on the attention of the user on important dates, events and tasks. It is basically a reminder application; but a smarter one. Apart from the features of conventional reminder applications, we introduce two advancements. The one is of sharing the events; and the other one, adding events using image scanning.

In our day-to-day life, it is expected to leave some dates or tasks unattended. The hustle of the day or the hardship of our work may add to this. Here comes the relevance of a reminder application that notifies the events or important dates and Smart-reminder accomplishes this. The conventional reminder applications allow us to add events, store in the device and gives notifications or alarms on time. In this smart era, it not enough to stay with these olden features and thus introduced some magnificent features.

The feature of 'shared list' facilitates us to share our events with others in a group; which means the events are shareable. An event added by any member of the group is accessible to all the group members. A member can add events to a group, thus the event is shared with all. A user can be a member of multiple groups and also each group can have multiple events.

The second feature, which facilities us to add events or reminder date, is a key feature of the application. In this application, we have two methods for entering or adding events or tasks. One is the conventional method of entering the 'title', 'description' and setting the alert date and time manually. In this modern era, it's time to think of having advancements. And thus the feature of having event entries via scanning images. This makes use of the techniques of 'character recognition' and 'image processing'. Here the documents such as 'Driving license' or 'Income certificates' can be scanned using the device. From the document, Smart-reminder extracts the expiry date of the document and also it sets all the fields such as title, description, alert date, and alert time etc. automatically. Thus it reduces the hustle of entering the details manually and works in a smarter way. Smart-reminder will be a great aid for every one irrespective of the age, profession or engagements. It works simple; but acts smart.

1.1 Abstract

The proposed system is a Smart Reminder. The conventional or ordinary To-Do list and Reminders facilitates us to have entries manually either as pointed lists or event entry on calendars. Our system makes difference that it facilitates an auto entry by extracting the expiry date from documents and notify the user as the expiry or renewal date is met. The time or period of notification can be set manually apart from the default one. The system compares the extracted date with the system date and gives notifications. It makes use of image processing techniques to extract dates. This smart entry method is an extension to the existing system as the proposed one also provides all the basic functionalities of a To-Do list and Reminder. This will be helpful as there is a chance to miss the event in course of long period of time.

1.2 Background

We have number of android applications to have reminder and to make To-Do lists. Even though, we have some limitations. These apps can help in reminding Daily To-Do tasks, meeting, homework and assignments, business appointments, important dates etc. we are provided with too many features such as adding events priority wise, adding color tags, adding images, backing up tasks online, event collaborator with labels etc. and found simple to use it. In this modern smart era, it's time to think something innovative to this field also. The conventional systems doesn't provide the facility of adding events by scanning the documents and extracting the expiry dates, as it is important not to miss the renewal or expiry dates of the same. Also, even though some applications such as 'Google Keep Notes' have the facility to store or backup the events online, it doesn't allow the user to share the events with others or to have a common event accessible for multiple users. It doesn't allow the user to share the events with others or to have a common event accessible for multiple users. The conventional systems doesn't provide the facility of adding events by scanning the documents and extracting the expiry dates, as it is important not to miss the renewal or expiry dates of the same. e may miss some important events or dates of major occasions as well as dates of renewal.

2.SYSTEM ANALYSIS

In this chapter, we will discuss and analyze about the developing process of Smart-Reminder including software requirement specification (SRS) and comparison between existing and proposed system . The functional and non functional requirements are included in SRS part to provide complete description and overview of system requirement before the developing process is carried out. Besides that, existing vs proposed provides a view of how the proposed system will be more efficient than the existing one.

2.1 SOFTWARE REQUIREMENT SPECIFICATION

2.1.1 Objective

The aim of the proposed system is a smart reminder application and its Prime focus is to have a notifying system and also to make the conventional reminder applications smarter.

1. To create a more user friendly android application.
2. Prime focus is to have a notifying system.
3. Makes the reminder app smarter.
4. Facility to share events to others.
5. Easier event entry method.
6. System notifies the important dates and events.
 - To-Do tasks
 - Expiry or renewal dates

2.1.2 General Description

Mainly there are 4 types of modules

1. Personal list

2. Shared list
3. Manual entry
4. OCR-Document scan entry
5. Event visibility

Personal list

Personal list is a feature used usually. Here the user can add events or tasks which is personal to his/her; that is the events will be visible or accessible only the user of the device. It has enhanced with the method of event entry that we can add events either by entering manually or by scanning the document. It makes use of SQLite database which the events will be stored in the device storage itself.

Shared list

Shared list is a feature for sharing events with others. On logging in, it shows the list of groups in which the user is a member. On clicking the groups, events or tasks in the group will be visible. From there, we can add events either by entering manually or by scanning the document. We can also add new users from the window and make the events of the group accessible to that newly added user. On long clicking the group list, we can delete the specific group and on long clicking the event, we can delete the event; that is a confirmation box on deletion will be displayed.

Manual entry

User add the event manually. Here the fields like 'Title' and 'Description' are entered by typing and alert date can be selected from calendar and alert time can be selected from clock which is popped up.

OCR scan entry

Events can be added by scanning the document. For instance scanning the 'Driving License' will extract the expiry date from the document and will be set to the reminder date field. Also the fields like 'Title', 'Description' and reminder time will be set automatically. And also, this is capable of editing or updating the fields.

Event visibility

Events added to the application is listed. On logging in, the user can view the list of groups with 'group name' in which the user is a member. On clicking the group name, list of events are shown and on clicking the events, more detailed view is shown and is capable of editing and on long click the events or groups can be deleted.

2.1.3 Software Specification

- Windows 10 Home- Operating system
- PHP
- XAMPP control panel v 3.2.4.
- Sublime text v 3.2.2
- Android studio 3.6.3

2.1.4 Software and Hardware Requirements

This section describes the software and hardware requirements of the system

2.1.4.1 SOFTWARE REQUIREMENTS

- Operating system- Windows 10 is used as the operating system as it is stable and supports more features and is more user friendly

- Database MYSQL-MYSQL is used as database as it easy to maintain and retrieve records by simple queries which are in English language which are easy to understand and easy to write.
- Development tools and Programming language- ANDROID STUDIO is used to write the whole code and develop and PHP for sever side scripting

2.1.4.2 HARDWARE REQUIREMENTS

- Intel core i5 2nd generation is used as a processor because it is fast than other processors an provide reliable and stable and we can run our pc for longtime. By using this processor we can keep on developing our project without any worries.
- Ram 1 GB is used as it will provide fast reading and writing capabilities and will in turn support in processing.

Existing System:

Currently, we have a number of android applications to add reminders and make ToDo lists. These apps can help in reminding Daily To-Do tasks, meeting, homework and assignments, business appointments, important dates etc. we are provided with too many features such as adding events priority vise, adding color tags, adding images, backing up tasks online, event collaborator with labels etc. and fount simple to use it.

In this modern smart era, it's time to think something innovative to this field also. The conventional systems doesn't provide the facility of adding events by scanning the documents and extracting the expiry dates, as it is important not to miss the renewal or expiry dates of the same. Also, even though some applications such as 'Google Keep Notes' have the facility to store or backup the events online, it doesn't allow the user to share the events with others or to have a common event accessible for multiple users.

Limitations of existing system:

Even though we have too many application with the intent of having reminders or To-Do lists, we have some limitations. It doesn't allow the user to share the events with others or to have a common event accessible for multiple users. The conventional systems doesn't provide the facility of adding events by scanning the documents and extracting the expiry dates, as it is important not to miss the renewal or expiry dates of the same.

Proposed System:

This application will allow the user to organize the data in a simpler and easy way. The smart-reminder app reminds important dates, events and tasks. Our system makes difference that it facilitates an auto entry by extracting the expiry date from documents and notify the user as the expiry or renewal date is met. The time or period of notification can be set manually apart from the default one. The system compares the extracted date with the system date and gives notifications. It makes use of image processing techniques to extract dates. This smart entry method is an extension to the existing system as the proposed one also provides all the basic functionalities of a To-Do list and Reminder. This will be helpful as there is a chance to miss the event in course of long period of time.

In addition to this, we have a 'shared list', apart from private or personal list, which two or more devices can use or view a common list. Here users can create groups of multiple users and the events entered in the group will be shared to all the members. This will be very useful on a family atmosphere that, it helps in shopping as any member of the family can add to the list of things to buy and check the list either. Also notice that, even if one misses an event, others can have an eye on it. This application will be very useful in many fields such as the family, office or pear environments. It can be used for storing important date such as birthdays and anniversary details of appointments, special functions, meetings, get-togethers, while going for a shopping and so on.

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