**Project Analysis**

**CMSC 496 – 6380**

**Group 8**

**Robert Hunter Robinson**

**Jered Russell**

**Keith Tulloch**

**Program Name: Forget Me Not**

**Date of Revision: 9/9/2018**

**Revision Number: 3**

**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Revision Number** | **Date** | **Description** | **Name** |
| 0 | 9/5/2018 | Create document | Keith |
| 1 | 9 /8/2018 | Add input (reminder date) for user to choose when a reminder should be sent. Updated diagrams to reflect | Hunter, Keith |
| 2 | 9/9/2018 | Added requirements and matched subsystems to requirements. Added Possible Enhancements | Hunter |
| 3 | 9/9/2018 | Edited requirements 1-4, 10 to ensure functional requirements vs implementation. Deleted requirements 2,3. Updated Subsystem table to reflect Requirements table changes. Made changes to font size and shading for Requirements table to match Subsystems table. | Jered |
| 4 | 10/11/2018 | Replaced all references to SQL Database with .txt document due to inability to secure online SQL server for program, and added note for above remark. | Hunter |

**Project Analysis**

Note: All references to the Database are referring to a .txt document that is simulating the usage of an SQL database.

Outside system:

the user

Input data:

name, occasion, date, reminder date, wish list items; these are input by the user

Output data:

days left, reminder message; these are displayed to the user

Data processing:

store special dates in database, calculate days remaining, search database for entries

**Figure 1**

**Context diagram**

name; occasion; date; reminder date; wish list

Forget Me Not system

User

days left; reminder message

Figure 1 shows the context diagram for this system. The only outside entity influencing Forget Me Not is the user. Figure 1 illustrates the data input by the user and the data output by the system.

**Figure 2**

**Subsystem diagram**

**Forget Me Not System**

entries

search request

request entries

entries

Search

days left; reminder message

days left; reminder message

days left

Alert

Date Check

User

Database

User Interface

name; occasion; date; wish list; reminder date

name; date; occasion;

wish list; reminder date

reminder date; date

The following are descriptions of the subsystems shown in Figure 2.

User Interface (UI):

The UI is where the user will interact with Forget Me Not. The UI accepts input from the user and displays information to the user.

Database:

The database takes the data (name, date, reminder date, occasion, wish list) input to the UI and stores it.

Date Check:

The date check subsystem compares the current date to special dates and reminder dates stored in the database. If the current date is at or after the reminder date, the alert subsystem in enacted.

Alert:

When there are 7 or fewer days before a special date arrives, an alert is generated and sent to the user. The alert subsystem handles this.

Search:

This subsystem searches through the database, looking for special date entries that match a name or date the user is interested in.

Requirements:

|  |  |
| --- | --- |
| **Requirement #** | **Description** |
| 1 | The application shall allow user input through a desktop GUI. |
| 2 | The application shall allow a user to store special dates to be recalled later. |
| 3 | The application shall allow a user to input new entries to the database via a form with fields: Loved One’s Name, Occasion, Date. |
| 4 | The application shall ignore case type, but capitalize first and last names when new entries are created and stored in database. |
| 5 | The application shall require the format XX/XX/XXXX to input special date. |
| 6 | The application shall allow user to display all special dates for each month using a combo box with fields for each month. |
| 7 | The application shall allow a user to search the database by loved one’s name and display associated with special dates. |
| 8 | The application shall display a pop-up alert if user requests a reminder. |
| 9 | The application shall remind user of special dates approaching 7 days prior. |
| 10 | The application shall remind user of special dates on the day of. |

The following table lists the subsystems that implement each requirement.

|  |  |
| --- | --- |
| **Requirement #** | **Subsystems** |
| 1 | User Interface |
| 2 | Database |
| 3 | User Interface, Database |
| 4 | User Interface, Database |
| 5 | User Interface, Database |
| 6 | User Interface |
| 7 | User Interface, Search |
| 8 | Alert, User Interface |
| 9 | Date Check, Database, Alert, User Interface |
| 10 | Date Check, Database, Alert, User Interface |

**Possible Enhancements:** Adjust Alerts for user input alerts versus standard 7 day and day of reminders per requirements 11 and 12.