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| **SOFTWARE REQUIREMENTS SPECIFICATION (SRS)** |
| **FOR** |
|  |

**Team Name: Chat JTDAN**

**Class: COMP 490/L**

**Instructor:**

**Revision History**

| **Revision Letter** | **By** | **Change Description** | **Date** |
| --- | --- | --- | --- |
| 0/- | Chat JTDAN | First Draft | 05 November 2023 |
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# INTRODUCTION

## Scope

The Software Requirements specification document for “Goal” application, developed by the CSUN group, known as “Chat JTDAN”, delineates the creation of a software solution designed to facilitate efficient task organization and management. The primary aim of this application is to empower users by streamlining their workflow, augmenting productivity, and ensure effective task tracking and completion.

## Product Value

The Value of the Goal application is to make it easy to stay organized and manage your life. Accomplish what is important to you each day with My Day and Suggestions, personalized day planner tools. Whether it is for work, school, or home, Goal helps you organize and simplify your plans.

## Intended Audience

It’s available to all consumers. Whether you're a tech-savvy enthusiast, a busy professional, a student trying to manage their time , or anyone in between, our product is tailor-made to enhance your lifestyle. We believe in inclusivity and accessibility for all, which is why we've made sure that everyone can succeed using our app “Goal!”

## Intended Use

We made sure that our app “Goal!” could be used in a variety of ways for example:

1. Students struggle sometimes with time management and with getting all their assignments on time. Organizing a healthy schedule on how to get all their work done on time is crucial and I can stand by that since I’m a student myself. Thus, The intended use in this case would be that “Goal!” keeps up with the list of tasks you assign to it by sending reminders of when a separate task is due and as well keeping track of the progress made daily depending on how many tasks have been completed that day. This is displayed via a statistical graph in the app.
2. Doctors as well have a lot on their plate. We made “Goal!” an app that has ease of use which means making it user-friendly a top priority of ours. You don't need to be tech savvy to enjoy our product. It’s intuitive and straightforward to anyone now doctors could simply open the app and add in when their next appointment with their patient is going to be. Just by setting a time and date for when the event is taking place.

# FUNCTIONAL REQUIREMENTS

* FUNC\_SRS\_1.00 - The program shall have a button to add new main tasks which will allow the user to enter information about the task.
  + FUNC\_SRS\_1.01 - The program shall allow the user to enter a due date or a completion by date for the task.
  + FUNC\_SRS\_1.02 - The program shall allow the user to enter a short description for the task.
  + FUNC\_SRS\_1.03 - The program shall allow the user to create subtasks for each task.
    - The subtasks shall have their own:
      * Completion by dates
      * Short descriptions
      * Notes on completing the subtask
      * Link to parent tasks
  + FUNC\_SRS\_1.04 - The program shall allow the user to enter notes for the task, or other important information about the task.
* FUNC\_SRS\_2.00 - The program shall have a page displaying all the main tasks.
  + FUNC\_SRS\_2.01 - The main tasks on this page shall show their name, and their short descriptions.
  + FUNC\_SRS\_2.02 - Once clicked on the main task, a page shall open that will have all the information of said task, as well as links to subtasks.
  + FUNC\_SRS\_2.03 - There shall be a check box that indicates whether a task is completed or not.
* FUNC\_SRS\_3.00 - The program shall have a calendar page.
  + FUNC\_SRS\_3.01 - The calendar page shall allow the user to see completion by dates.
  + FUNC\_SRS\_3.02 - The calendar page shall allow the user to also see which tasks are due when the user taps on a particular date.
  + FUNC\_SRS\_3.03 - The calendar page shall have arrows to allow users to move from month to month.
* FUNC\_SRS\_4.00 - The program shall have buttons at the bottom of the page to allow the user to switch between pages.
  + FUNC\_SRS\_4.01 - The buttons shall be for the main task page, calendar page and statistics page.
* FUNC\_SRS\_5.00 - There shall be a statistics page, which will have different statistics about completed tasks.
  + Some examples of statistics that shall be on this page are:
    - Time on average it takes to complete major tasks.
    - What percentage of a task is completed.
    - How long you have been working on a task.
* FUNC\_SRS\_6.00 - There shall be pop-ups to congratulate or motivate the user when they have finished or are close to finishing a task. The same will happen for reminders when a task is almost due.

# EXTERNAL INTERFACE REQUIREMENTS

## User Interface Requirements

EXTINTF\_SRS\_1.00 - The user will be able to tap on dates on a calendar interface and also tap arrow buttons to move from month to month.

EXTINTF\_SRS\_1.01 - The home screen will display a list of tasks that will be organized in a list form; the user can tap on each task to expand it for more details. Each task will have an edit button and a deletion button for the user to make any modifications to individual tasks.

EXTINTF\_SRS\_1.02 - For task completion, the user will be able to tap on a check mark next to each task’s name to mark it as completed.

EXTINTF\_SRS\_1.03 - From the home screen, the user can access pages for both deleted and completed tasks. On those respective pages, tasks can be recovered, which will bring them back to the home page

EXTINTF\_SRS\_1.04 - Besides calendar dates (unless a date is selected), all buttons will be color-coded to indicate interactive functionality.

EXTINTF\_SRS\_1.05 - At the header of the home page will be the name of the app; at the footer will be information about the version of the app as well as help information.

EXTINTF\_SRS\_1.06 - On each task, the user may access dropdown menus to schedule due dates for each task.

EXTINTF\_SRS\_1.07 - When the user taps on the date from the calendar page, the date’s popup shall display the titles of any tasks that have been marked on their respective pages to be due on that day. On any task’s page, a due date may be scheduled via a dropdown menu.

EXTINTF\_SRS\_1.08 - The buttons on the bottom of the page will have icons indicating where they lead (The home page a home icon, calendar page a calendar icon, etc.)

## Hardware Interface Requirements

EXTINTF\_SRS\_2.00 - The App shall support any smartphones that run on Android OS 7.0 or later.

Supported Device Examples:

* + Samsung Galaxy line
  + Google Pixel mainline
  + Motorola
  + Nokia

As the app operates offline, there are no network requirements or communication protocols to be used.

## Software Interface Requirements

EXTINTF\_SRS\_3.00 - Both the frontend and backend sides of this app will be built in Android Studios.

## Communication Interface Requirements

EXTINTF\_SRS\_4.00 - While there will not be in-app support, users may find an email at the header of the home page of the app that they may email with any feedback for the app.

# NON FUNCTIONAL REQUIREMENTS

## Security

NONFUNC\_SRS\_1.00 - App will only be available through Google Play Store.

## Capacity

NONFUNC\_SRS\_2.00 - The Android application itself will be under 64 MB with additional storage <64 MB for database entries stored inside the application.

## Compatibility

The minimum hardware requirements for this application will be:

Operating System: Android 11 API 30

CPU: Octa-core (2x2.0 GHz 360 Gold & 6x1.7 GHz Kryo 360 Silver)

Memory: 4GB

Screen Resolution: 1080 x 2280 pixels (5.6” Screen)

Free Space Required: 64 MB after Installation

\*\* Specifically, these are Google Pixel 3a Specs\*\*

## Reliability

NONFUNC\_SRS\_4.00 - The app could only crash if there is a problem with available memory or if the device ran out of free storage.

## Scalability

NONFUNC\_SRS\_5.00 - The graphic resolution of the app along with the screen size will scale to the capabilities of the device it’s running on.

* On smaller screen devices with lower resolutions, the app will scale to it. If the screen size is larger, the app will scale to fill the screen.

## Usability

NONFUNC\_SRS\_6.00 - The usability of this application will be intuitive to somebody who isn’t tech savvy.

NONFUNC\_SRS\_6.01 - The app will be available by pushing a button on the app store.

NONFUNC\_SRS\_6.02 - The use of the device will involve swiping screens up and down along with pushing buttons. Screens will appear with the appropriate information telling the user what to do.

## Other

N/A

# QUALIFICATION PROVISIONS

Qualification in this specification is interpreted as requirement verification. The following are the base definitions for the verification methods.

A – Analysis: Use of analytical data or simulations under defined conditions to show theoretical compliance. Used where testing to realistic conditions cannot be achieved or is not cost-effective. Analysis (including simulation) may be used when such means establish that the appropriate requirement, specification, or derived requirement is met by the proposed solution. Examples include the reduction, interpretation or extrapolation of test data.

D – Demonstration: A qualitative exhibition of functional performance, usually accomplished with no or minimal instrumentation. Demonstration (a set of test activities with stimuli selected by the developer) may be used to show that the CSCI, or a part of the CSCI, response to stimuli is suitable (e.g. observation of fin deployment, etc.). Demonstration may be appropriate when requirements or specifications are given in statistical terms (e.g. mean time to repair, etc.).

I – Inspection: The examination of the CSCI code against applicable documentation to confirm compliance with requirements. Inspection is used to verify properties best determined by examination and observation.

T – Test: An action by which the operability, supportability, or performance capability of the CSCI, or a part of the CSCI, is verified when subjected to controlled conditions that are real or simulated. These verifications often use special test equipment or instrumentation to obtain very accurate quantitative data for analysis.

**Table IV. Requirements Verification**

| **SRS Req. ID** | **Paragraph Title** | **Verification Method** |
| --- | --- | --- |
| FUNC\_SRS\_1.00 | The program shall have a button to add new main tasks which will allow the user to enter information about the task. | Inspection |
| FUNC\_SRS\_1.01 | The program shall allow the user to enter a due date or a completion by date for the task. | Demonstration |
| FUNC\_SRS\_1.02 | The program shall allow the user to enter a short description for the task. | Demonstration |
| FUNC\_SRS\_1.03 | The program shall allow the user to create subtasks for each task. | Demonstration |
| FUNC\_SRS\_1.04 | The program shall allow the user to enter notes for the task, or other important information about the task. | Demonstration |
| FUNC\_SRS\_2.00 | The program shall have a page displaying all the main tasks. | Demonstration |
| FUNC\_SRS\_2.01 | The main tasks on this page shall show their name, and their short descriptions. | Demonstration |
| FUNC\_SRS\_2.02 | Once clicked on the main task, a page shall open that will have all the information of said task, as well as links to subtasks. | Demonstration |
| FUNC\_SRS\_2.03 | There shall be a check box that indicates whether a task is completed or not. | Demonstration |
| FUNC\_SRS\_3.00 | The program shall have a calendar page. | Demonstration |
| FUNC\_SRS\_3.01 | The calendar page shall allow the user to see completion by dates. | Demonstration |
| FUNC\_SRS\_3.02 | The calendar page shall allow the user to also see which tasks are due when the user taps on a particular date. | Demonstration |
| FUNC\_SRS\_3.03 | The calendar page shall have arrows to allow users to move from month to month. | Inspection |
| FUNC\_SRS\_4.00 | The program shall have buttons at the bottom of the page to allow the user to switch between pages. | Inspection |
| FUNC\_SRS\_4.01 | The buttons shall be for the main task page, calendar page and statistics page. | Demonstration |
| FUNC\_SRS\_5.00 | There shall be a statistics page, which will have different statistics about completed tasks. | Demonstration |
| FUNC\_SRS\_6.00 | There shall be pop-ups to congratulate or motivate the user when they have finished or are close to finishing a task. The same will happen for reminders when a task is almost due. | Demonstration |
| EXTINTF\_SRS\_1.00 | The user will be able to tap on dates on a calendar interface and also tap arrow buttons to move from month to month. | Demonstration |
| EXTINTF\_SRS\_1.01 | The home screen will display a list of tasks that will be organized in a list form; the user can tap on each task to expand it for more details. Each task will have an edit button and a deletion button for the user to make any modifications to individual tasks. | Demonstration |
| EXTINTF\_SRS\_1.02 | For task completion, the user will be able to tap on a check mark next to each task’s name to mark it as completed. | Demonstration |
| EXTINTF\_SRS\_1.03 | From the home screen, the user can access pages for both deleted and completed tasks. On those respective pages, tasks can be recovered, which will bring them back to the home page. | Demonstration |
| EXTINTF\_SRS\_1.04 | Besides calendar dates (unless a date is selected), all buttons will be color-coded to indicate interactive functionality. | Demonstration |
| EXTINTF\_SRS\_1.05 | At the header of the home page will be the name of the app; at the footer will be information about the version of the app as well as help information. | Demonstration |
| EXTINTF\_SRS\_1.06 | On each task, the user may access dropdown menus to schedule due dates for each task. | Demonstration |
| EXTINTF\_SRS\_1.07 | When the user taps on the date from the calendar page, the date’s popup shall display the titles of any tasks that have been marked on their respective pages to be due on that day. On any task’s page, a due date may be scheduled via a dropdown menu. | Demonstration |
| EXTINTF\_SRS\_1.08 | The buttons on the bottom of the page will have icons indicating where they lead (The home page a home icon, calendar page a calendar icon, etc.) | Demonstration |
| EXTINTF\_SRS\_2.00 | The App shall support any smartphones that run on Android OS 7.0 or later. | Demonstration |
| EXTINTF\_SRS\_3.00 | Both the frontend and backend sides of this app will be built in Android Studios. | Demonstration |
| EXTINTF\_SRS\_4.00 | While there will not be in-app support, users may find an email at the header of the home page of the app that they may email with any feedback for the app. | Demonstration |
| NONFUNC\_SRS\_1.00 | App will only be available through Google Play Store. | N/A |
| NONFUNC\_SRS\_2.00 | The Android application itself will be under 64 MB with additional storage <64 MB for database entries stored inside the application | Analysis |
| NONFUNC\_SRS\_4.00 | The app could only crash if there is a problem with available memory or if the device ran out of free storage. | N/A |
| NONFUNC\_SRS\_5.00 | The graphic resolution of the app along with the screen size will scale to the capabilities of the device it’s running on. | N/A |
| NONFUNC\_SRS\_6.00 | The usability of this application will be intuitive to somebody who isn’t tech savvy. | Demonstration |
| NONFUNC\_SRS\_6.01 | The app will be available by pushing a button on the app store. | Demonstration |
| NONFUNC\_SRS\_6.02 | The use of the device will involve swiping screens up and down along with pushing buttons. Screens will appear with the appropriate information telling the user what to do. | Demonstration |

# NOTES

This section contains any general information that aids in the understanding of this SRS. At a minimum, it should include an alphabetical listing of all acronyms, abbreviations, and their meanings as used in this SRS and a list of any terms and definitions needed to understand this SRS. Create subparagraphs 6.x as needed. Note that the list of acronyms and abbreviations are ***specific to this SRS*** and should not contain program-wide terms that are not used within this document.

The sample text below illustrates additional information along with acronyms and abbreviations. Note that acronyms and abbreviations should follow any other types of notes in this section:

## Acronyms and Abbreviations

**Table VII. Acronyms and Abbreviations**

| **Abbreviation** | **Full name** |
| --- | --- |
| Acronym | Full name |