

# **Software Implementation and Testing Document**

**For**

**Group <9>**

Version 3.0

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## **1. Programming Languages**

- Java is used for the functionality of the Android app
- XML for the design of the application

## **2. Platforms, APIs, Databases, and other technologies used**

- Android is the basis of the entire program
- The content provider is built internally using a SQL database
- Firebase was used in the login and registration

## **3. Execution-based Functional Testing**

Testing was done by manually registering the users and logging them in to see if they worked. The content provider was tested by manually inserting data into the content provider. The dates and time pickers were tested by showing the times or dates selected on the buttons. The calendar was tested by seeing if the events were written correctly when selected. The Procrastiaint button was tested by checking if the new event created was uploaded to the calendar.

## **4. Execution-based Non-Functional Testing**

Ran the different activities over time to test app stability. It is very easy to find all the different options immediately which makes it easy for the end user. It has the ability to run on different android phones as well as multiple android versions past 5.0. Database consistency when writing and reading from the database.

## **5. Non-Execution-based Testing**

Cohesion between the different classes and activity switching was checked to make sure transitions happened as intended. The algorithms were looked at by other teammates to make sure the potential edges cases behaved in line with the intended behavior