#### How to Use this Template

- Create a new document, and copy and paste the text from this template into your new document [ Select All → Copy → Paste into new document ]
- 2. Name your document file: "Capstone\_Stage1"
- 3. Replace the text in green

**Description** 

Intended User

Features

**User Interface Mocks** 

Screen 1

Screen 2

#### **Key Considerations**

How will your app handle data persistence?

Describe any corner cases in the UX.

Describe any libraries you'll be using and share your reasoning for including them.

Describe how you will implement Google Play Services.

Next Steps: Required Tasks

Task 1: Project Setup

Task 2: Implement UI for Each Activity and Fragment

Task 3: Your Next Task

Task 4: Your Next Task

Task 5: Your Next Task

GitHub Username: ramyhelow

# My Daily Planner

# Description

Daily Planner allows you to be more productive and organized in your everyday life. Quickly create tasks, plan new projects or just write something down in your notes. Thanks to the Firebase cloud sync, you can be productive on all of your android devices.

## Intended User

People around age 18-40 who are focused on doing more every day and organizing their life.

## **Features**

- Create tasks
- Add details to tasks
- Group tasks into projects
- Quickly filter your tasks for today or tomorrow
- Look through finished tasks in archive
- Write your thoughts in notes
- Sync your data across multiple android devices
- See your tasks for today on the home screen, thanks to the widget

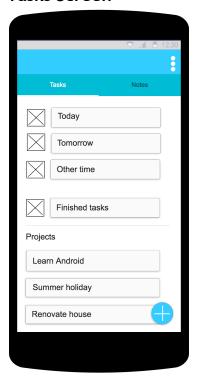
# Requirements

- App is written solely in the Java Programming Language
- The app includes support for accessibility
- App keeps all strings in the strings.xml file.
- The app enables RTL layout switching on all layouts.
- The app uses AsyncTask to check for active internet connection.

## **User Interface Mocks**

These can be created by hand (take a photo of your drawings and insert them in this flow), or using a program like Google Drawings, <a href="www.ninjamock.com">www.ninjamock.com</a>, Paper by 53, Photoshop or Balsamiq.

#### Tasks Screen



Main screen, displayed after user opens app

- Contains task categories, projects and FAB
- Task categories
  - Today: task due date = current date
  - Tomorrow: task due date = current date + 1 day
  - o Other time: task due date = current date + 2 days and more OR no due date
  - o Finished tasks: archive for tasks marked as "done". User can permanently delete tasks that are here, if he wants
  - After clicking on task category, app displays a screen with contents of that category

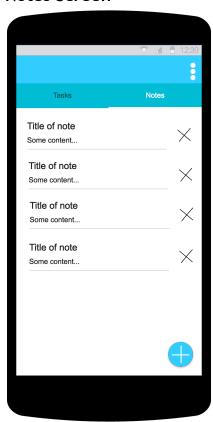
#### Projects

- o Project is a group of tasks which contribute to the same end goal
- o Once user creates a new project, he can add new or existing tasks into it
- o After clicking on project, app displays a screen with contents of that project

#### FAB

- Positioned in the bottom right corner
- o Allows user to create new tasks, projects or notes Settings
- o Positioned on the right side of action bar
- o Allows user to manually sync data
- Allows user to logout

## **Notes Screen**



Displayed after user selects Notes tab.

- Contains list of notes and FAB
- Each note has title on top and short part of note content under it
- On the right side of each note is delete icon
- FAB
  - o Positioned in the bottom right corner
  - o Allows user to create new tasks, projects or notes

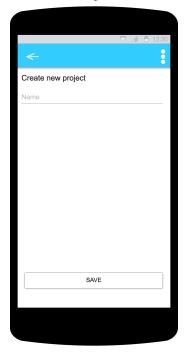
# **Create Task Screen**



Displayed after user selects "Create new task" in FAB.

- Allows user to set details of new task
  - Name (required)
  - o Description (optional)
  - Due date (optional)
  - Project (optional)

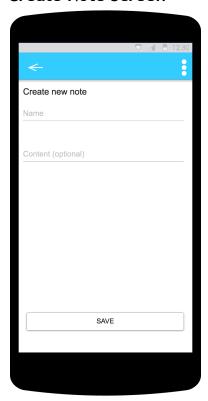
# Create Project Screen



Displayed after user selects "Create new project" in FAB.

• Allows user to set name of new project

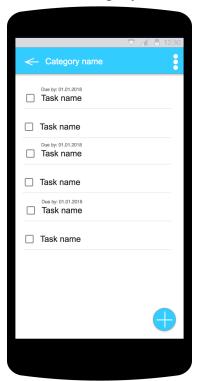
## **Create Note Screen**



Displayed after user selects "Create new note" in FAB.

• Allows user to set name and content of new note

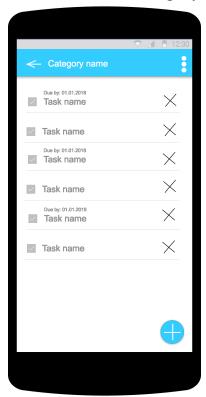
# **Normal Category Screen**



Displayed after user opens any normal task category – Today, Tomorrow or Other time

- Each task has checkbox and name
- If task has due date, it will be displayed on top
- if user marks task as done, it will be hidden from this list and moved to Finished tasks category
- FAB
- o Positioned in the bottom right corner
  - o Allows user to create new tasks, projects or notes

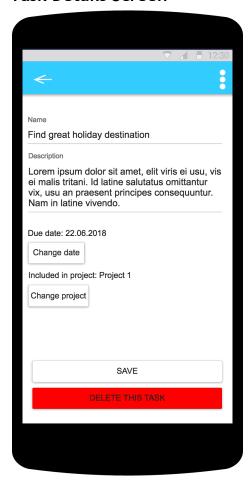
# **Finished Tasks Category Screen**



Displayed after user opens Finished tasks category

- Allows user to see all completed tasks
- By clicking on checkbox, user has option to mark task as not done
- Each task has delete button, which permanently deletes it from DB
- FAB
  - o Positioned in the bottom right corner
  - o Allows user to create new tasks, projects or notes

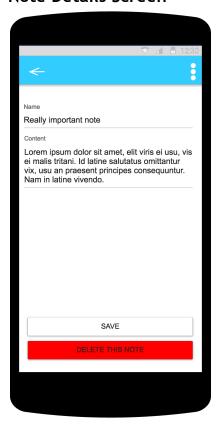
## Task Details Screen



Displayed after user opens any task

- Allows user to edit all details of selected task
  - o Name
  - o Description
  - o Due date
  - Project
- Delete this task button will permanently delete task from DB

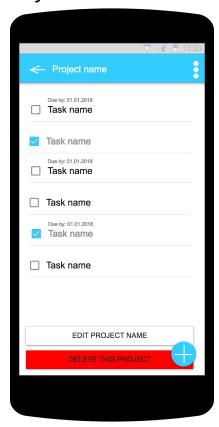
## **Note Details Screen**



Displayed after user opens any note

- Allows user to edit all details of selected note
  - o Name
  - o Content
- Delete this note button will permanently delete note from DB

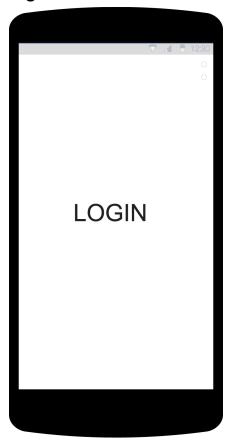
# **Project Screen**



Displayed after user opens any project

- Each task has checkbox and name
- If task has a due date, it will be displayed on top
- All tasks in selected project are displayed, not just unfinished ones
- Edit project name button allows user to change the name of selected project
- Delete this project button will permanently delete project from DB
- FAB
  - o Positioned in the bottom right corner
  - o Allows user to create new tasks, projects or notes

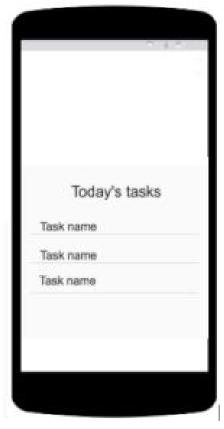
# Login Screen



Displayed after user open app for the first time or logs out

- Allows user to login with Google Account
- Allows Anonymous login for code reviewer

# Widget



Widget will allow user to displays tasks for today on his home screen.

# **Key Considerations**

How will your app handle data persistence?

App will use Firebase Realtime Database

Describe any edge or corner cases in the UX.

If user deletes project that contains tasks, the tasks will stay in the app and won't be deleted. Logic behind this is that some users may simply want to get rid of the project and not lose all tasks associated with it.

Describe any libraries you'll be using and share your reasoning for including them.

Gradle Version 3.4.2 Android Gradle Plugin Version 3.4.2 Gradle Version 5.1.1

ButterKnife for better view binding
Affolestad Material Dialogs for various material dialogs

FirebaseUI which allows you to quickly connect common UI elements to Firebase APIs.

RTLViewPager which allows rtl viewpager support

implementation 'androidx.appcompat:appcompat:1.1.0'

testImplementation 'junit:junit:4.12'

androidTestImplementation 'androidx.test:runner:1.2.0'

androidTestImplementation 'androidx.test.espresso:espresso-core:3.2.0'

implementation 'com.google.android.material:material:1.0.0'

implementation 'com.google.code.gson:gson:2.8.5'

implementation 'com.google.firebase:firebase-core:17.2.0'

implementation 'com.google.firebase:firebase-database:19.2.0'

implementation 'com.google.firebase:firebase-analytics:17.2.0'

implementation 'com.firebaseui:firebase-ui-database:6.0.2'

implementation 'com.firebaseui:firebase-ui-auth:6.0.2'

implementation 'com.jakewharton:butterknife:10.2.0'

annotationProcessor 'com.jakewharton:butterknife-compiler:10.2.0'

implementation 'com.google.android.material:material:1.0.0'

implementation 'com.afollestad.material-dialogs:core:0.9.6.0'

Describe how you will implement Google Play Services or other external services.

Firebase Auth for user authentication

Firebase Realtime Database for saving data

Firebase Analytics which provides insight on app usage and user engagement

## Next Steps: Required Tasks

This is the section where you can take the main features of your app (declared above) and break them down into tangible technical tasks that you can complete one at a time until you have a finished app.

#### Task 1: Project Setup

- Create a new project
- Set the SDK details,
- Configure libraries

#### Task 2: Implement UI for Each Activity and Fragment

- Build UI for main screen fragments Tasks and Notes
- Build UI for task categories
- Build UI for new task screen
- Build UI for new note screen
- Build UI for new project screen
- Build UI for task details activity
- Build UI for note details activity
- Build UI for project details activity

#### Task 3: Implement Firebase Realtime Database

- Connect app to Firebase
- Add Firebase Realtime Database to app-level build.gradle
- Configure Firebase Database Rules
- Write to database
- Read from database

## Task 4: Implement Firebase Auth

- Set up sign-in through google account
- Customize the sign-in UI

## Task 5: Create widget that displays tasks for today

- Build UI for widget activity
- Implement Widget refresh functionality

## Task 6: Implement UI for tablets

Build tablet UI for main screen fragments – Tasks and Notes

- Build tablet UI for task categories
- Build tablet UI for new task screen
- Build tablet UI for new note screen
- Build tablet UI for new project screen
- Build tablet UI for task details activity
- Build tablet UI for note details activity
- Build tablet UI for project details activity

Add as many tasks as you need to complete your app.

#### **Submission Instructions**

- After you've completed all the sections, download this document as a PDF [ File → Download as PDF ]
  - Make sure the PDF is named "Capstone\_Stage1.pdf"
- Submit the PDF as a zip or in a GitHub project repo using the project submission portal

#### If using GitHub:

- Create a new GitHub repo for the capstone. Name it "Capstone Project"
- Add this document to your repo. Make sure it's named "Capstone\_Stage1.pdf"