

How to Use this Template

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GitHub Username: deepaksharma1992 (<https://github.com/deepaksharma1992>)

Krishi Seva (App name)

Description

This application helps farmers of India to get the best price for their crops by contacting the vendors directly. It also helps them to know the best bank which is providing best loan price along with status of electricity cut and latest news around the world.

Environment details and library versions used.

- This application is solely written in Java and the IDE used is Android Studio 3.1.3.
- All strings, dimensions and colors are stored in string.xml, dimen.xml and colors.xml file respectively.
- com.jakewharton:butterknife:8.8.1 [Data binding]
- com.github.bumptech.glide:glide:4.8.0 [Image loading from web]
- com.google.firebase:firebase-database:16.0.3 [Firebase Realtime database]
- com.google.android.gms:play-services-location:16.0.0 [Location services]

- `com.google.android.gms:play-services-places:16.0.0` [Places services]

Intended User

The intended users are the Farmers who want to sell their crops and get the best price for them by removing the mediator who works on commissions.

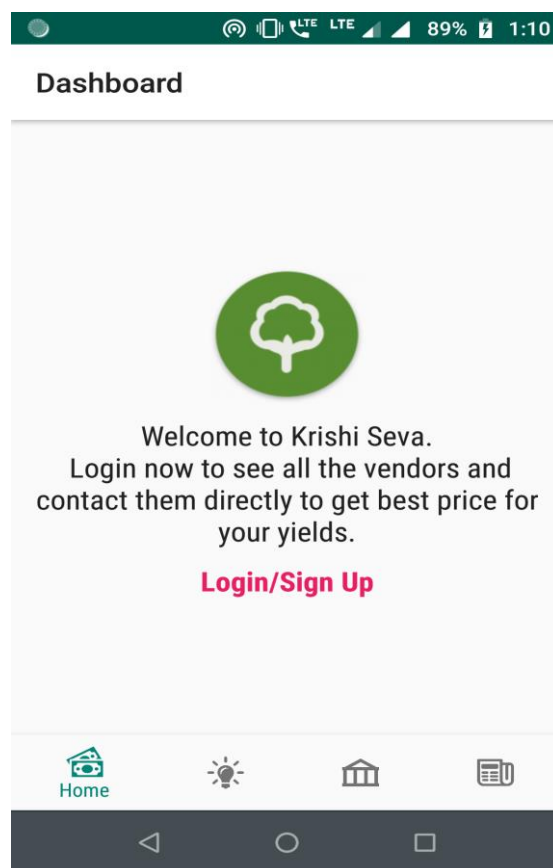
Features

List the main features of your app. For example:

- List vendors across the country with the best price.
- List the best bank among India with star ratings and interest rate.
- Provide the electricity cut information.
- Provides the latest news around the world and allow them to read in browser.

User Interface Mocks

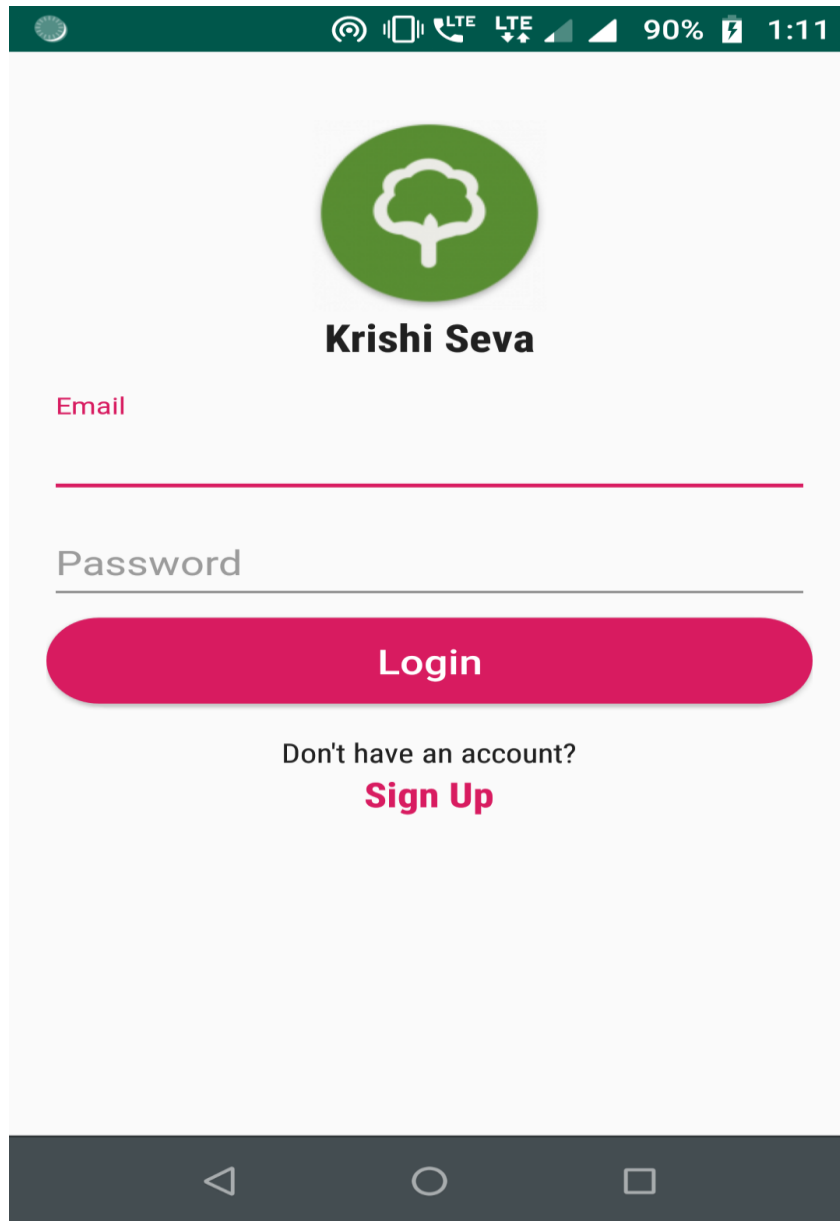
Screen 1



Welcome Screen

- This is the first screen of the application and tells user to login or sign up with the application to see the vendors across the country.


Screen 2



Login Screen

- This screen allow user to enter his credentials and log in to the application
- The user will be able to see the vendors list once he log in with the application.

Screen 3



Sign Up

Username

Email

Phone number

Password

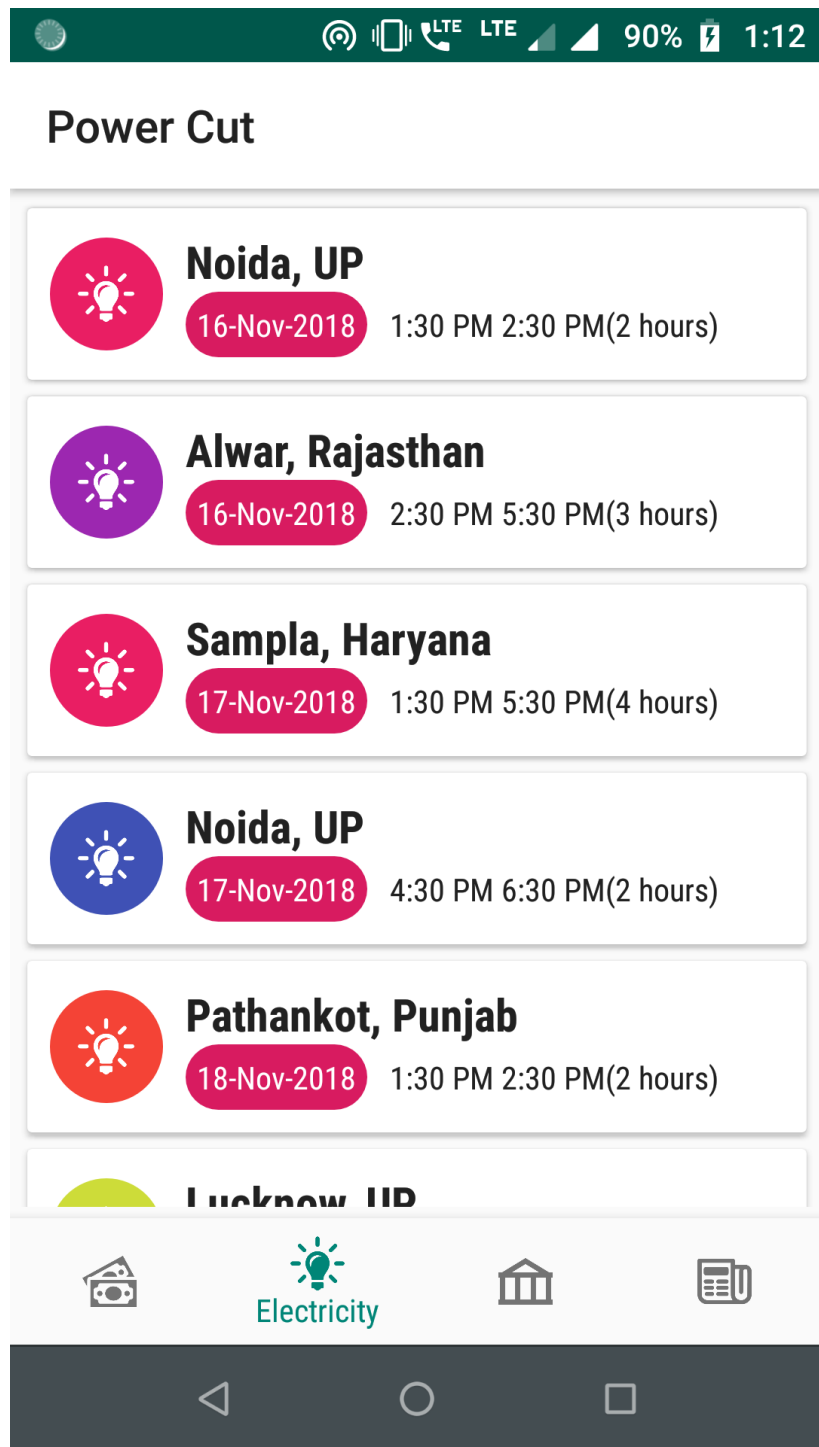
Confirm Password

Sign Up

Sign Up Screen

- This screen allows new farmers to register themselves with Krishi Seva to see the vendor's details around them.

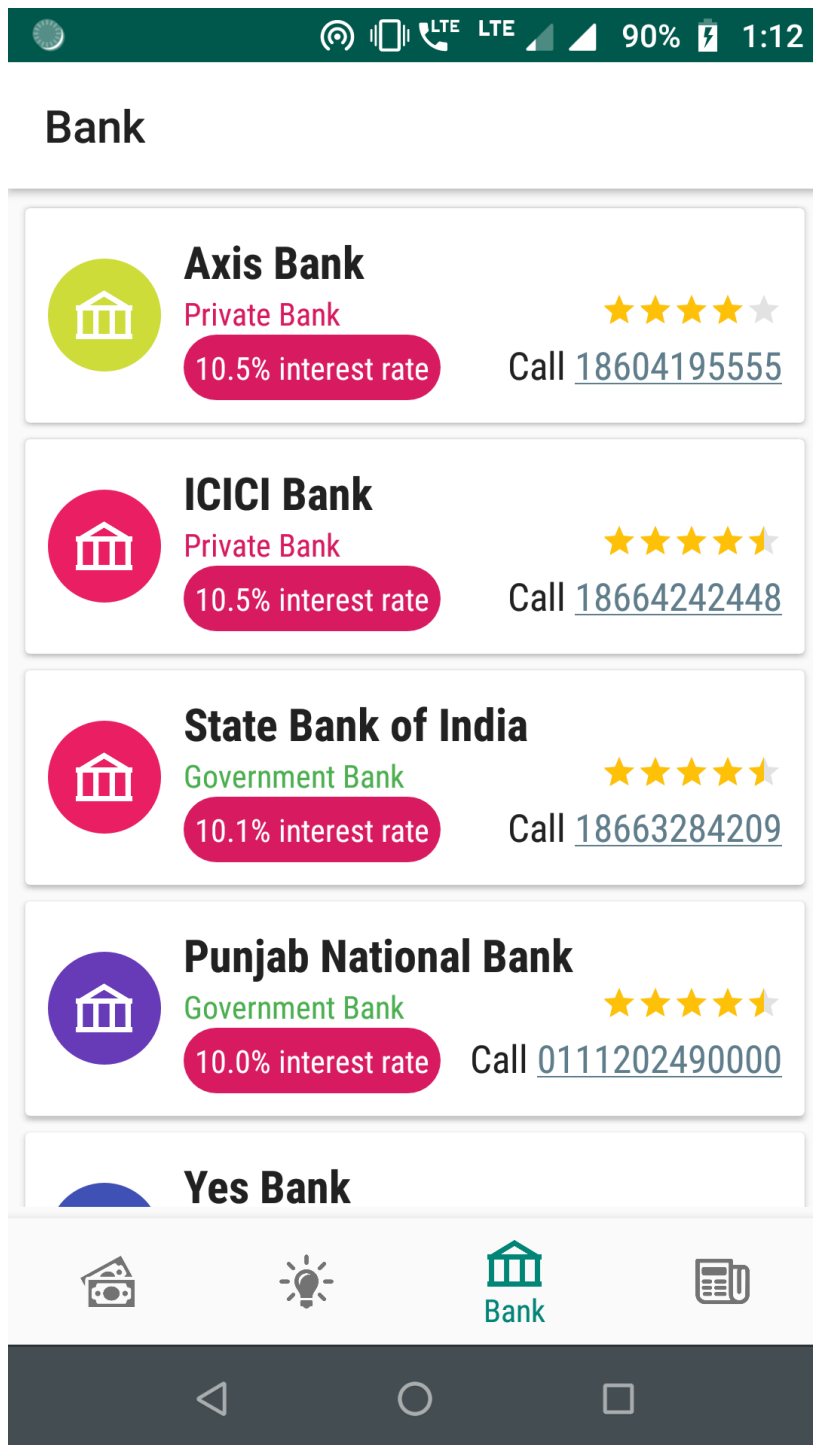
Screen 4



Power Cut Screen

- This screen informs the user the power cut status in coming weeks along with the period and area in which electricity will not be available.

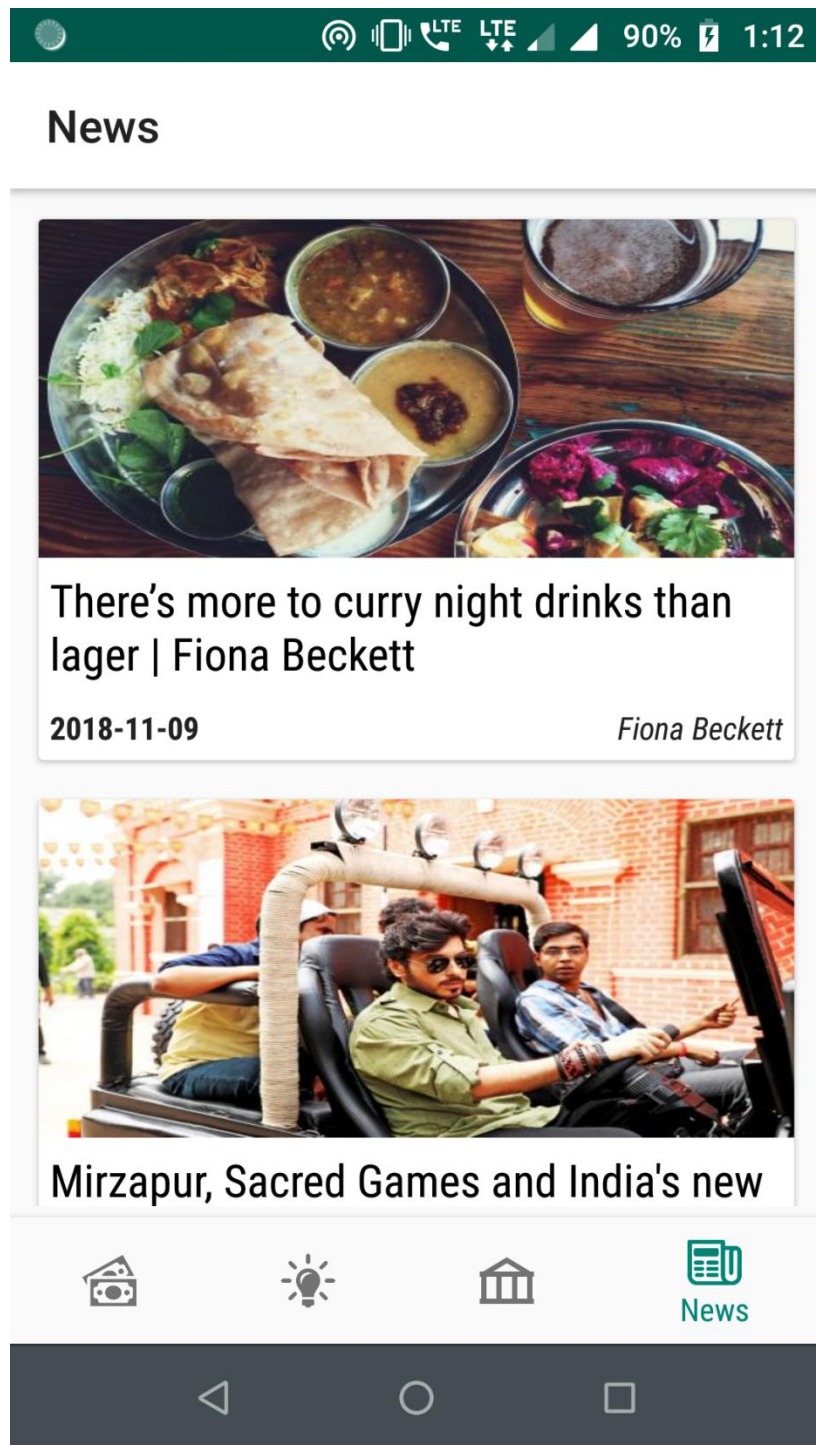
Screen 5



Bank Screen

- This screen informs the user of the banks which are giving loan on less interest rates.
- It also allows user to call to the bank by opening the phone app.

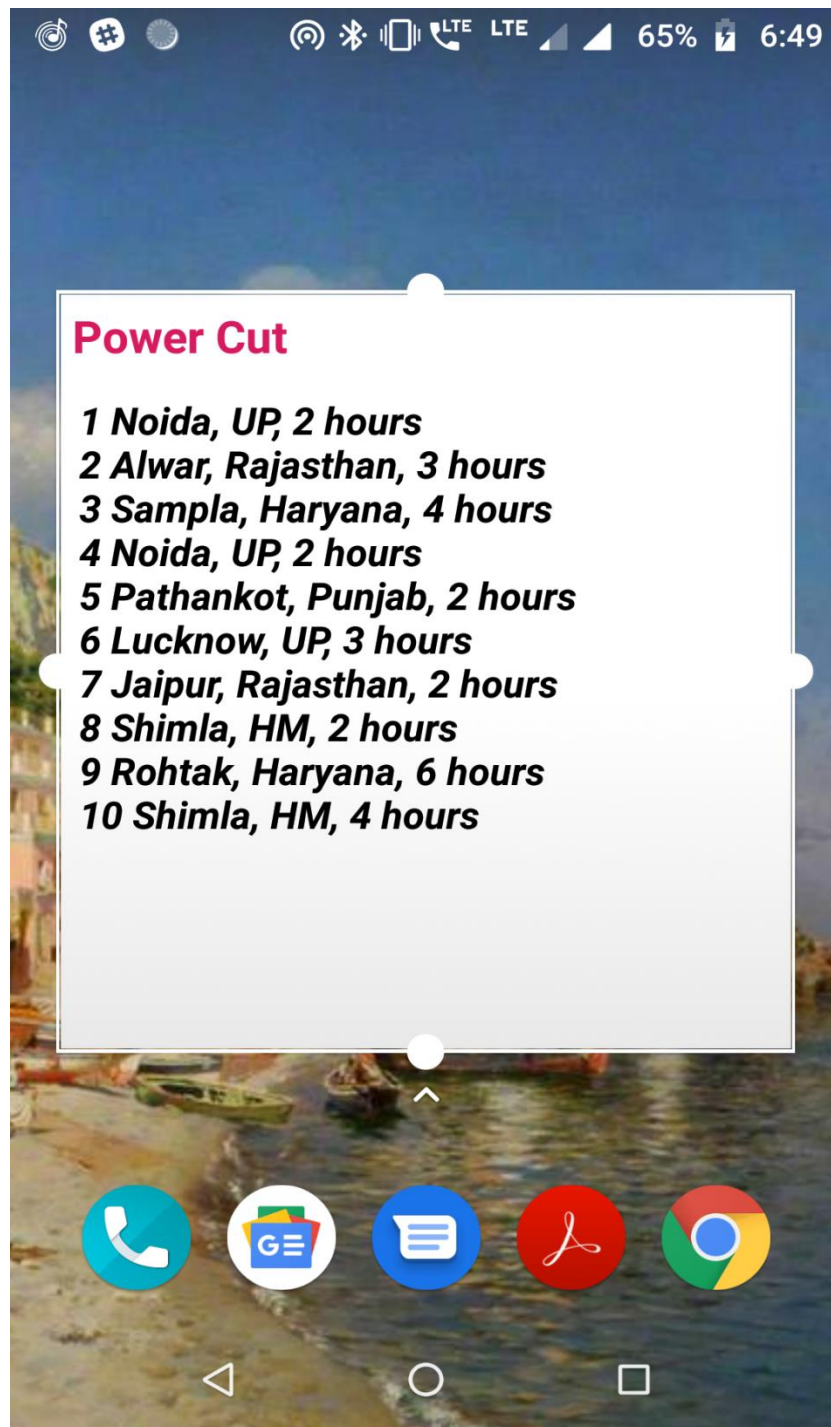
Screen 6



News Screen

- This screen shows the latest news to the user.
- User can read the news in detail on his user by clicking on the news item.

Screen 7



Widget Screen

- Widget for Krishi seva which shows power cut status.

Key Considerations

How will your app handle data persistence?

Application data is stored in Firebase real time database system. Application fetches the pre populated data for vendors, banks and electricity. Application also save the user details on firebase database which is used to login the user.

Describe any edge or corner cases in the UX.

Any user will be allowed to get login to the application and will be able to see the electricity status, banks and news but the vendor details will only be displayed if the user is logged in successfully.

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

- Glide is used to load the images for news items from the server.
- Butterknife is used for data binding.

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

- Google location service will be used to detect the current location using Fused Location API.
- Google places API will be used to enter the location of the user with help of places fragment.

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

- Configured the firebase library on android project and created new project on firebase console.
- Configured the Google places services on Google play console and added the required dependencies.
- Added other dependencies for image loading and data binding.

Task 2: Implement UI for Each Activity and Fragment

- Build UI for Login Activity and Sign Up Activity.
- Provided validation for empty and existing user by searching the user on the firebase real time database record.
- Build UI for Dashboard Activity.
 - Created UI for Welcome Fragment, Vendor Fragment, Bank Fragment, News Fragment
 - Created the UI for each list adapter to show the list items.

Task 3: Configured the Firebase RealTime Database

- Created the new project on Firebase console and integrated the android dependencies.
- Populate the data for bank, electricity status and vendors.
- Fetch the data from firebase db and display them on List UI using Recycler View and CardView.

Task 4: Log In & Sign Up

- Allow the user to log in Sign Up using Firebase database.
- Validate the empty edit text fields and the existing users.

Task 5: Google Places and Location Services.

- Integrated the Google location services where the user can detect his current location.
- Used Reverse geocoding to convert the location coordinated into the plain text field.
- Integrated the Google places services and created the application on the Google Developer console. User can enter his location and the auto complete fragment will search and give suggestion to the user.

Task 6: News Screen.

- Integrated the guardians news web API to get the latest agriculture news.
 - Created the Intent service to fetch and download the guardian news data.
 - User can read the news on his web browser when tapping on the application.
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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**"