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Earthquake Survival

Description

Earthquake Survival allows you to see all the earthquakes around the U.S. and notifies about closest to you (you can set the notifying threshold for strength and distance from you).

You can find the latest news about earthquakes, share info and statistics with your friends.

Earthquake Survival also has a lot of useful information about what to do in case of emergency, who to call, what to buy and how to survive.

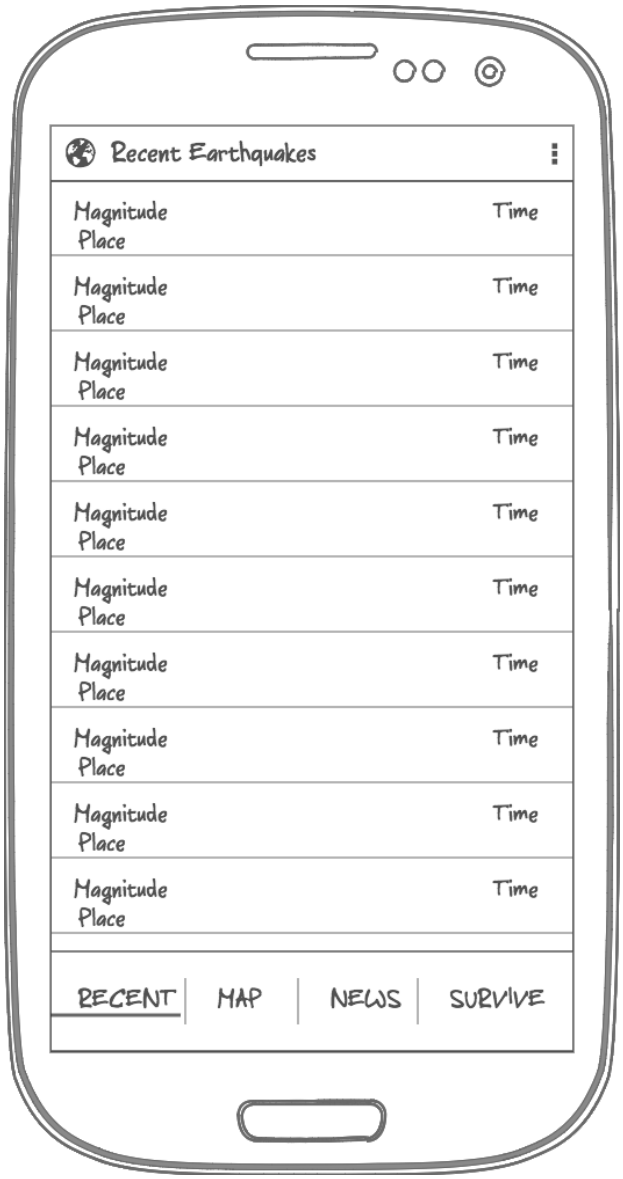
Intended User

People who care about what is happening with the Earth, who wants to survive and be informed about earthquakes activity around them. Application will be especially handy for people from California.

Features

Earthquake Survival App has following functionality

- Shows a map and a list with all earthquakes around you (uses your location) in the last 24 hours (or longer)
- You can share with your friends, that earhquake happened near you and you are ok (details of the earthquake will be automatically added to the message)
- Shows related articles about emergency situations around you, shows earthquake statistics, shows notifications about earthquakes
- Has built-in how to survive guid (what to pack in case of an emergency, who to call, what to do)



User Interface Mocks

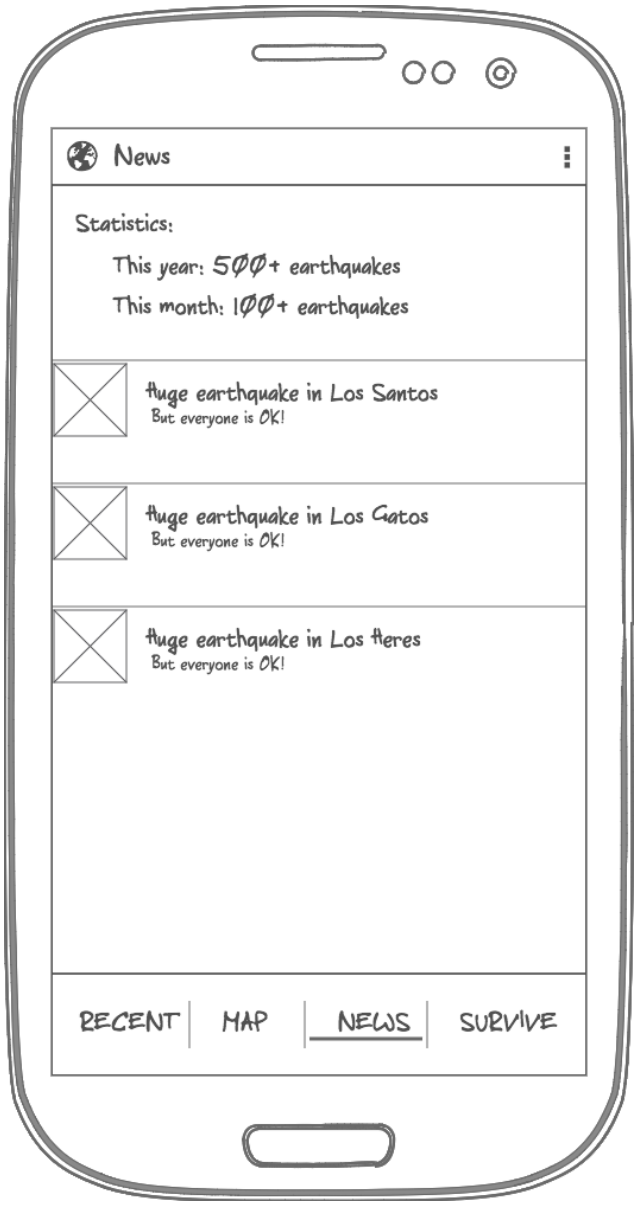
Main screen.

Main screen with a list of recent earthquakes around you with details about them. By pressing on an item you will go to the activity where phone will try to find some information about this earthquake (request to google news and then will show you all the news which it can find).

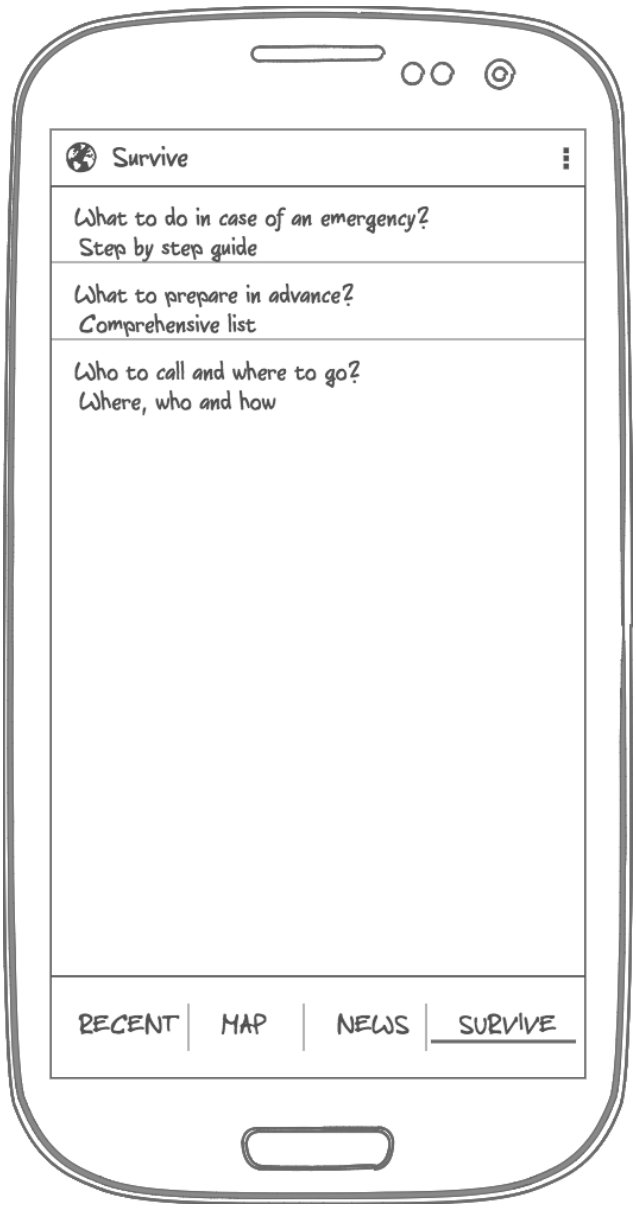
Map Screen.

Screen with a Google Map where you can see all earthquake activity around the U.S. (maybe the whole world in the future).

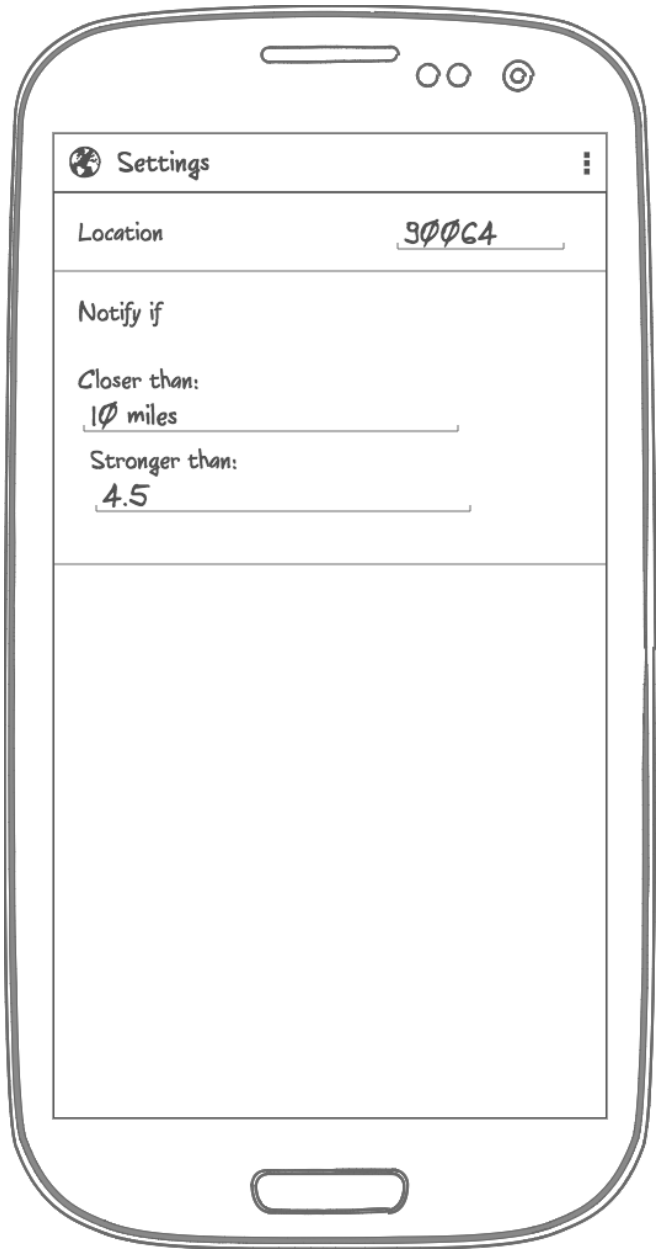
Each circle is clickable with short information abouth the earthquake. Each earthquake is sharebale.



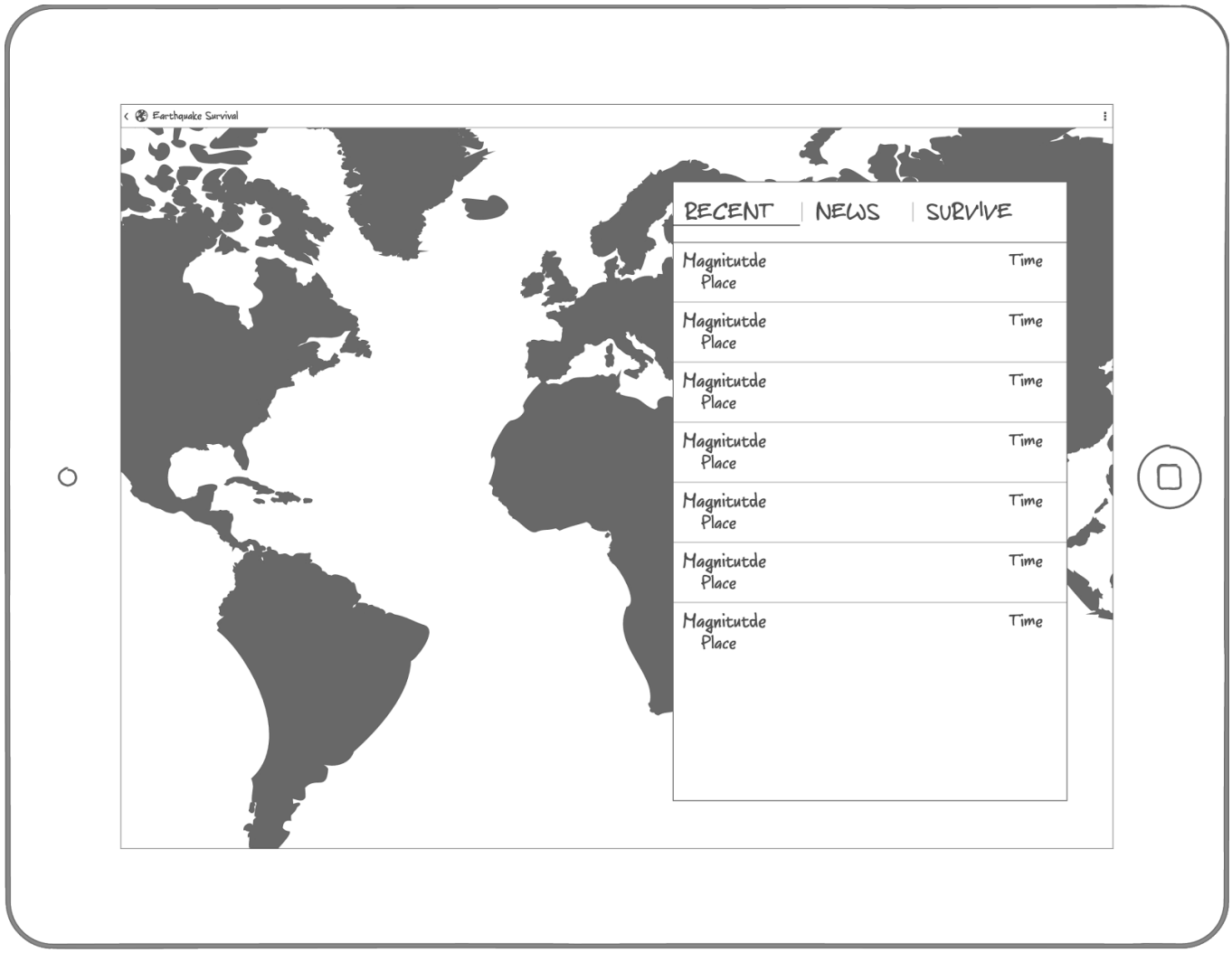
News screen.
A view with some statistics about earthquakes in the U.S. and a list of earthquake-related news.



Survive Screen.
View with a list of recommendations on what to do in case of an emergency. Each item opens a detailed view with an article and relevant information.



Settings Screen.
A screen where you can manually input your location. You can also set your notification settings if you want to get relevant information about earthquakes in the U.S.



Tablet Screen.
A screen where you can find all the required information in one place on a tablet. Screen consists of two fragments: a map and an additional information fragment.

Key Considerations

How will your app handle data persistence?

Data will be downloaded from USGS API and stored in the local database, news will be fetched from google news RSS feed and also stored in the local database. All settings will be stored as sharedpreferences.

Describe any corner cases in the UX.

Tablet design will use only 1 activity with multiple fragments, while mobile version will use several activities.

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

Different Google APIs libraries: Maps, Location, Admob (for advertising, interstitial ads)
Image loading: Picasso

Life-simplifiers to reduce typing of boiler-plate code: Butterknife
Network Connections: OkHttp, Retrofit for fetching and parsing the data from USGS API.

Next Steps: Required Tasks

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

Task 1: Project Setup

1. Create the project.
2. Intialise git, add all the needed libraries.
3. Check all the APIs and their documentation.

Task 2: Implement UI for Each Activity and Fragment

1. Create UIs for every activity and fragment.

Task 3: Implement network connections to the APIs

1. Implement required classes to handle network calls to the API's.
2. Make objects from JSON and RSS data.
3. Create ContentProvider and a database to store both earthquake data and news articles.

Task 4: Implement Google Location and Maps functionality

1. Add functionality to the Maps activity.
2. Add location functionality to the app.
3. Implement Custom view for earthquakes on the map.
4. Connect data with the map.

Task 5: Fill app with the data to survive

1. Create Google Clound Endpoints with the library which holds survival information to be able to update/add data without asking users to update their apps.

Task 6: Final touches

1. Add sharedtransitions between activities.
2. Add meaningfull notifications.
3. Test the app on real users.