

Description

Intended User

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Main screen (Screen 1)

Details screen (Screen 2)

Feeding screen (Screen 3)

Growth screen (Screen 4)

Settings screen (Screen 5)

Widget

Key Considerations

How will your app handle data persistence?

Describe any edge or 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 or other external services.

Next Steps: Required Tasks

Task 1: Project Setup

Task 2: Creating main screen and tab layout

Task 3: Creating content for the first fragment (baby development)

Task 4: Creating content for the feeding fragment

Task 5: Creating content for the growth fragment

Task 6: Creating preference activity

Task 7: Creating widget

**GitHub Username:** [gkancheva](#)

**App name:** **BabySteps**

**Description**

BabySteps is a practical simple app providing weekly information about the baby's development, milestones to achieve, tips and other information during the first year. The app provides as well option to track the daily feeding and growth.

## Intended User

New parents and families of newborns.

## Features

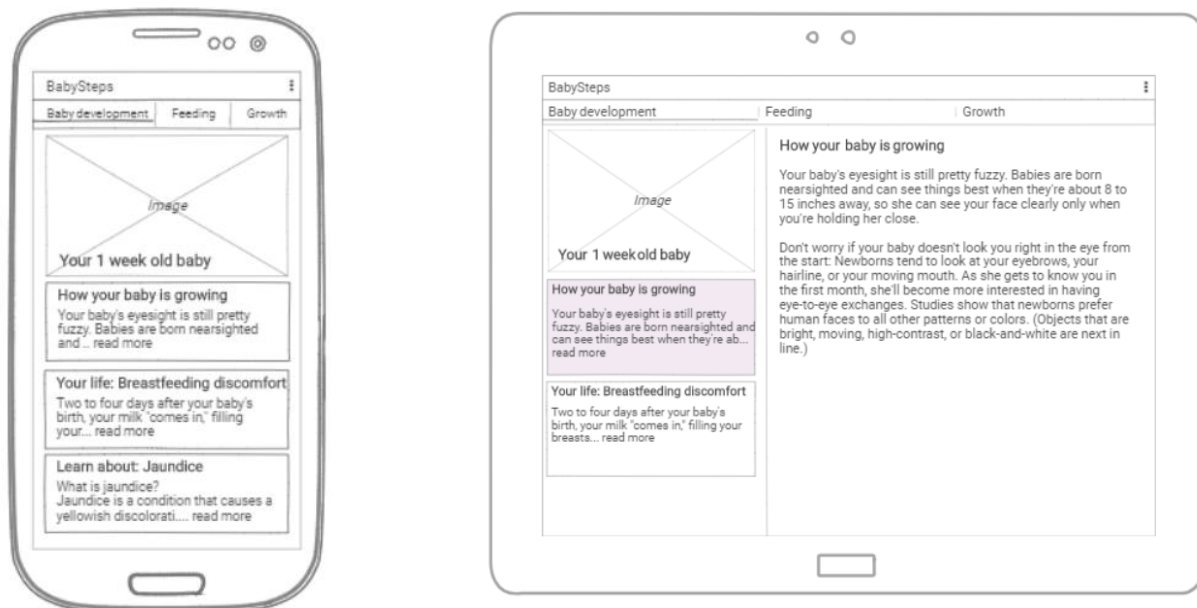
Main features:

- Provides weekly information about baby`s development and milestones to achieve
- Keeps track of baby feeding
- Keeps track of baby growth

## User Interface Mocks

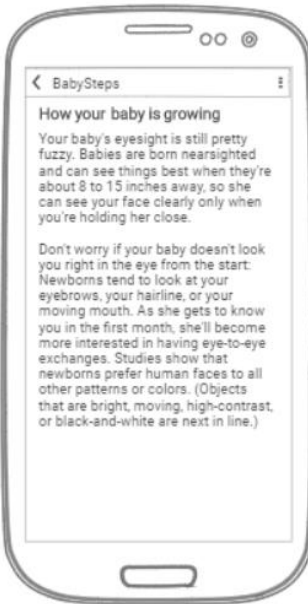
### Main screen (Screen 1)

The main screen has three tabs – baby development, feeding and growth. The first tab provides information about the respective week of growth. The screen has title with an image and list of the posts related to this week. For tablets, the main screen navigation is presented on the left, and clicking on an list item loads the details of the clicked item on the right.



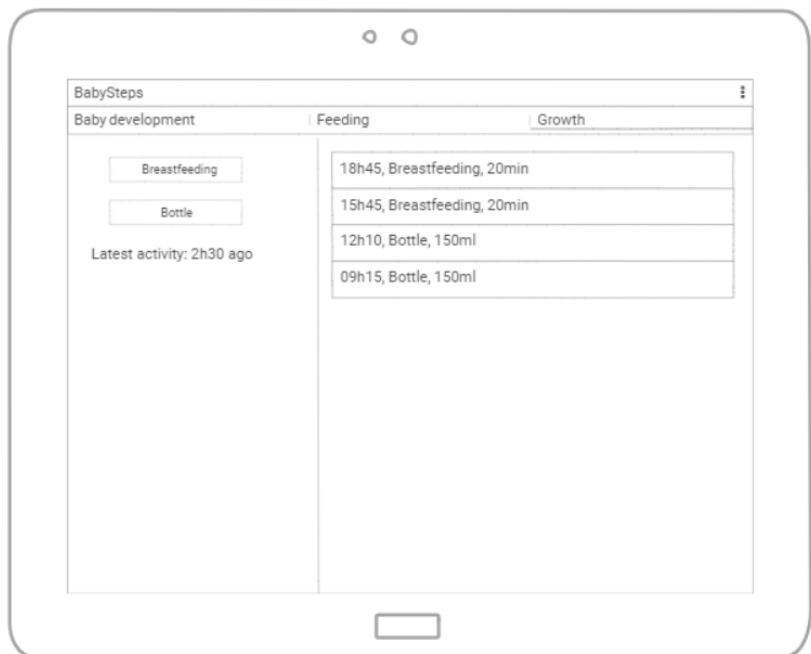
### Details screen (Screen 2)

After clicking on an item in the list of the main screen, tab Baby development opens the detailed information of the respective clicked post.



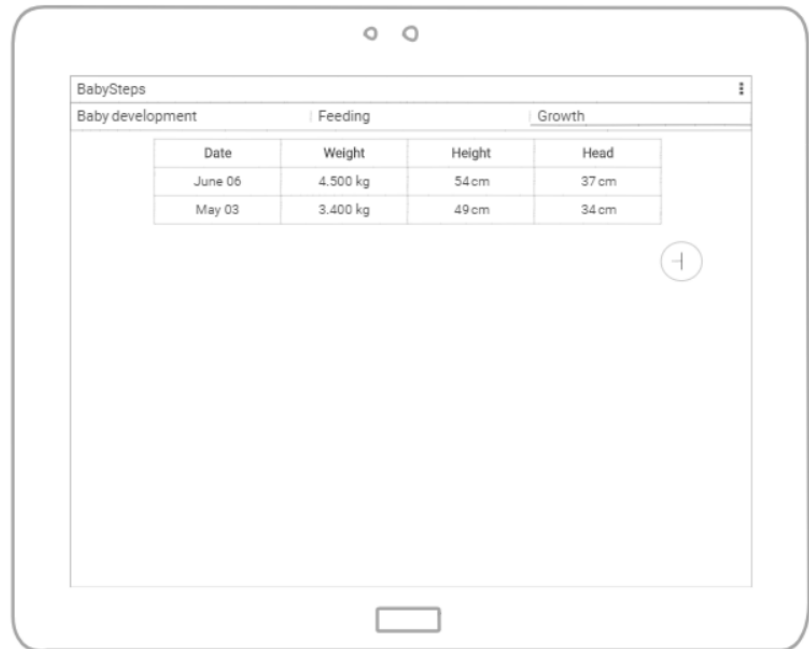
### Feeding screen (Screen 3)

The feeding screen provides information about the feeding activity. Clicking on the button “breast feeding” starts a timer and clicking on the button “bottle” provides dialog screen for creating new feeding activity (bottle).



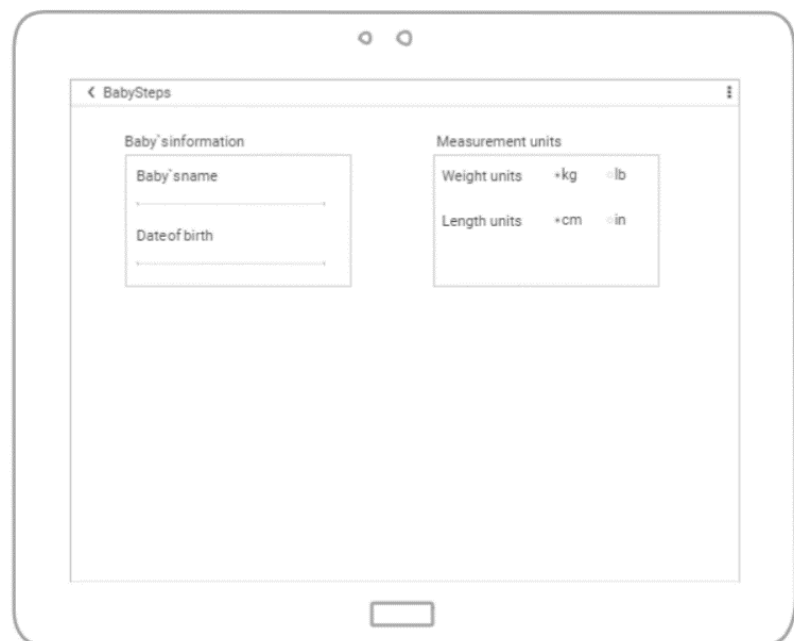
## Growth screen (Screen 4)

The growth screen provides information about the physical growth of the baby (weight, height and head circumference). This screen is used for creating new entry by clicking on an “add button”. This will open a dialog for creating new entry.



## Settings screen (Screen 5)

In settings, the user will be able to choose his preferences for measurement units and baby's information (baby's name, date of birth).



## Widget

Widget will provide information about the baby's week/month and the titles of the posts relevant to this week. Clicking on the widget will open the main screen.



## Key Considerations

### How will your app handle data persistence?

The app stores locally on the device information in a SQLite database. Various tables are needed: feeding\_table, growth\_table, information about the baby itself (date of birth, name). A Content Provider will handle the access to the database. For the background task will be used Loader class managed by Loader manager.

### Describe any edge or corner cases in the UX.

When the app is first launched, this will require entering name and the newborn's date of birth. This will allow a weekly notification concerning development information and milestones.

The main screen uses Tab Layout, View pager and fragments for navigation between the three tabs – baby development, feeding and growth.

In feeding screen clicking on button will pop-up a dialog screen. On cancel or back button pressed, the dialog will be closed.

Clicking on the widget will open the main screen.

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

Programming language: Java 9

IDE: Android Studio 3.1.3

Gradle: v4.4

Libraries:

- com.android.support:appcompat:v7:27.1.1
- com.android.support.constraint:constraint-layout:1.1.2 (for better design the single post and the rest of the fragments)
- com.android.support:design: v7:27.1.1 (for use of AppBarLayout, CoordinatorLayout and CollapsingToolbarLayout)
- com.android.support:cardview: v7:27.1.1 (for displaying the posts in cards)
- com.android.support:recyclerview: v7:27.1.1 (for recycling each post card)

Third parties:

- **Picasso**, v2.5.2 for handling the loading and caching of images
- **ButterKnife**, v8.8.1 for binding the views
- **Jsoup**, v1.10.1 for parsing HTML information and displaying it in the app

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

Admob will be used to display commercials in the app.

Google analytics will be used to track what is the user's activity in the app.

## 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

Configuring the necessary libraries for the project.

Creating the structure of the project.

Creating the needed entities that would be used in the project.

App will keep all strings in a strings.xml file and will enable RTL layout switching on all layouts.

App will include support for accessibility (content descriptions and others)

### Task 2: Creating main screen and tab layout

Building UI for the main screen and each one of the fragments:

- Baby development
- Feeding
- Growth

### **Task 3: Creating content for the first fragment (baby development)**

Parsing information from the website ([www.babycenter.com](http://www.babycenter.com)) and applying its content in the fragment. Create:

- class that will handle asynchronously the information from the website using Loader and AsyncTaskLoader that uses AsyncTask
- mapper class that will load the raw data to a specific java objects
- recycler view adapter and view holders

### **Task 4: Creating content for the feeding fragment**

Create:

- phone and tablet layouts
- Content Provider class, Loader and repository class for access it

### **Task 5: Creating content for the growth fragment**

- Create phone and tablet layouts
- create the additional method for data persistence

### **Task 6: Creating preference activity**

- Create phone and tablet layouts
- Persisting preferences locally using SharedPreferences.

### **Task 7: Creating widget**

- Create widget layout
- Create WidgetProvider and WidgetService to support the widget