

GitHub Username: [Aritra1704](#)

PodEdu

Description

PodEdu is a simple, easy to use app for children educational purpose using Podcast wherever and whenever possible. Simple poems, math table rhymes, small historical info, easy to go dictionary, weather updates and most recent news which can be saved locally for future reference.

Intended User

Students.

Features

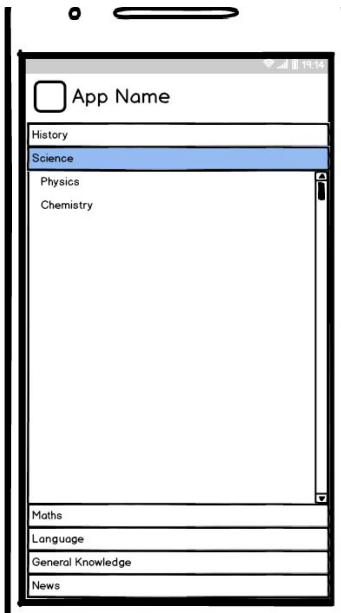
List the main features of your app:

- Saves information
- Shows podcasts
- Weather and news updates.

User Interface Mocks

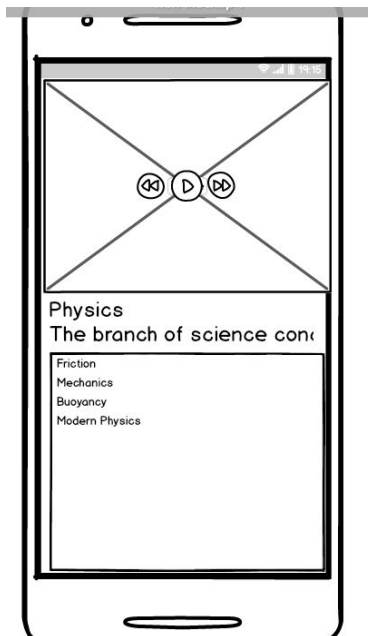
These can be created by hand (take a photo of your drawings and insert them in this flow), or using a program like Photoshop or Balsamiq.

Screen 1



Here I will show a bunch of list of all the subjects or all the topics and the sub-topics available.

Screen 2



This is the detailed screen providing details of the selected topics with all the subtopics explanation podcast video if possible, audio link for poems or rhymes or new link to other topics. (Designs are not finalised as of now, might change once start to implement.)

Key Considerations

How will your app handle data persistence?

Will create a content provider if implementing sharing then might use Contacts contentprovider.

Describe any corner cases in the UX.

Don't think this situation might arise as of now.

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

Will surely use these:

1. `com.android.support:design:`
2. `com.android.support:appcompat-v7:`
3. `Com.google.android.gms:play-services:` (May need)
4. `Com.squareup.picasso:picasso:` (For showing images)
5. `Com.android.support:cardview-v7:` (Card view structure in list)
6. `com.github.Aritra1704:UtilitiesJitPackLib:` (My libraries for common uses)
7. `com.github.Aritra1704:LocationFinder:` (Finding location for weather updates)
8. `com.github.Aritra1704:CustomAlerts:` (Custom dialogs popups if required)
9. May need some more for podcast and designing purposes.

Describe how you will implement Google Play Services.

Uses of Google APIs:

- For weather updates in the form of notifications everyday morning and wearable watchface implementation I might use google play services.
- And local news should have first preference than any international news so to implement that I need to use Location services google api. So if I travel from one place to another as per the location updates the news updates will also vary.

Next Steps: Required Tasks

Task 1: Project Setup

First need to gather all data source regarding this project. I have this idea but don't have any data source where I might find all these. Math tables are ok can be implemented in the code, but rhymes and General Knowledge data needs to be fetched from somewhere.

Any apis for these data and podcast which can be used for educational purpose is welcome.

Task 2: Implement UI for Each Activity and Fragment

List the subtasks. For example:

- Build UI for MainActivity and detail activity
- Integrate API calls and saving the data in local database.
- Implement calculated methods to flush away old and unused data to speed away the local database fetching procedures.
- Integrate podcast feature.
- Show weather updates in widget forms and notification at everyday morning as per the current location.
- Show new news update in widgets. Prepare design for widget.

Task 3: Data optimization and reusability

Subtasks:

- Optimize all data and code reusability for similar modules. Create single screen for all possible same data paths with all possibilities of error handling.
- All the content provider data insertion, updation, deletion has to happen in AsyncTask Loader.
- All the background data fetching work has to be done in IntentService.
- First time app opens a certain amount of data has to be fetched from the apis in AsyncTask loader holding the ui. Later onwards it can be fetched periodically in background via IntentService or while doing pull down to refresh.
- All the data will be inserted and maintained in the content provider so that user can check it out even when he is in offline mode.
- All the data will be saved along with its created date column which will be used to clear out if news material is too old to be cleared out unless it's been marked important.

Task 4: Support multiple Android versions.

Support code for multiple versions of Android.

- Permission handling for devices above Marshmallow.
- Support for devices atleast upto Jellybean.

Task 5: Final testing

Final testing procedures for all modules, orientation changes

