

COMP 590 - Android Development System Proposal

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Abstract

For the class project of COMP 590 - Mobile Development, we would like to contribute to existing open source android app - Software Engineering Daily(SE Daily). SE Daily is a podcast app which produces and delivers technical content on various software engineering topics ranging from cloud engineering, security to machine learning. SE Daily is on web - softwaredaily.com, android and IOS platform. The app is in heavy development and has an early beta version. Its currently looking for volunteers to build/improve/fix functionality on either of their platforms.

1 Application Domain

The SE daily app falls into education space. Its main goal is to provide free technical content for software developers around the world.

2 Business problem or business need for the mobile application

Having a mobile application gives the community a custom interface instead of serving the podcast content via wordpress site. With mobile app, they can do user subscriptions, recommendations(long term goal), login, comments, etc. The aspirational idea is to build a community because the idea of 'developer community' has not really been solved and its not winner takes all (Stack overflow, dev.to, Free Code Camp, and Software Daily could all coexist successfully. Secondly, the volume of developers in the world is skyrocketing so forming a community around this podcast app is a good niche.

3 Three Distinct User Personas

The three distinct user personas can be

- **Student Developers** - students can absorb content at their leisure
- **Software Professionals** - office goers can stream podcast episodes during their commute time
- **Researchers** - researchers interested in hearing opinions of interviewee on their approaches to solve a particular problem

4 Basic Functional Scope

As the app already exist, our goal is to addon some new features, fix broken functionality, solve bugs. Following is list of tasks that we have brainstormed so far

- list view - currently only thumb view exist, adding a list view will stack the episodes vertically, adding more topics on first view of activity
- Authentication
 - allow user to set profile picture
 - reset password missing
- add a option to view downloaded podcasts
- ability to resume each episode playback at a later time/date
- Forum Integration
 - ability to upvote/downvote episodes
 - view threads per podcasts
 - post to thread
 - reply to post
- Feed Integration - Feed activity will contain users upvoted, downvoted episodes, threads he has commented on, etc.
- episodes scrolling doesn't work
- android test coverage - unit tests are missing

5 Baseline External Apps

There are already tons of podcast apps on android and iOS playstores like the popular NPR podcasts where the podcasts are exclusively NPR copyrighted. Also, there exist all-in-one(universal) podcast aggregator app (e.g podcast addict) with ability to add any podcast feed of interests. But none of them tailors content according to users choices which is the long term goal of SE Daily. Also, as noted in section 2 of this report, SE Daily serves technical content to developers, hobbyists, professionals and researchers.