TECHNISCHE UNIVERSITÄT DRESDEN

Department of Computer Science Institute for System Architecture, Chair for Computer Networks

Application Development for Mobile and Ubiquitous Computing

Seminar Task First Presentation

GroupNo.18

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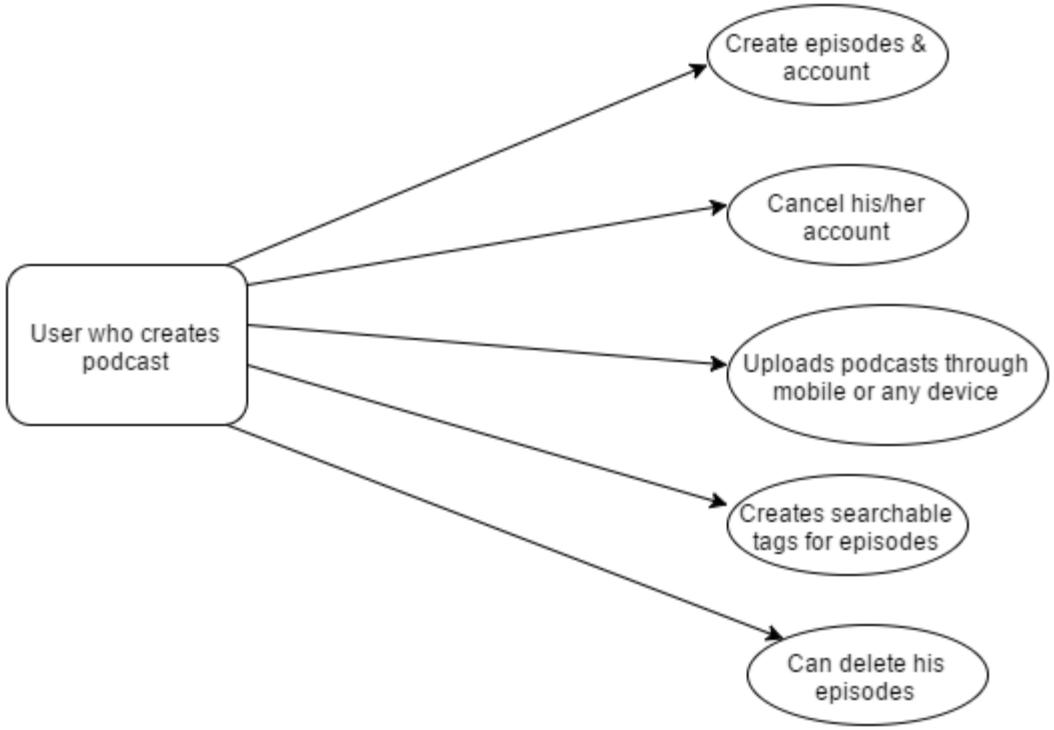
Application Scenario

Podcast

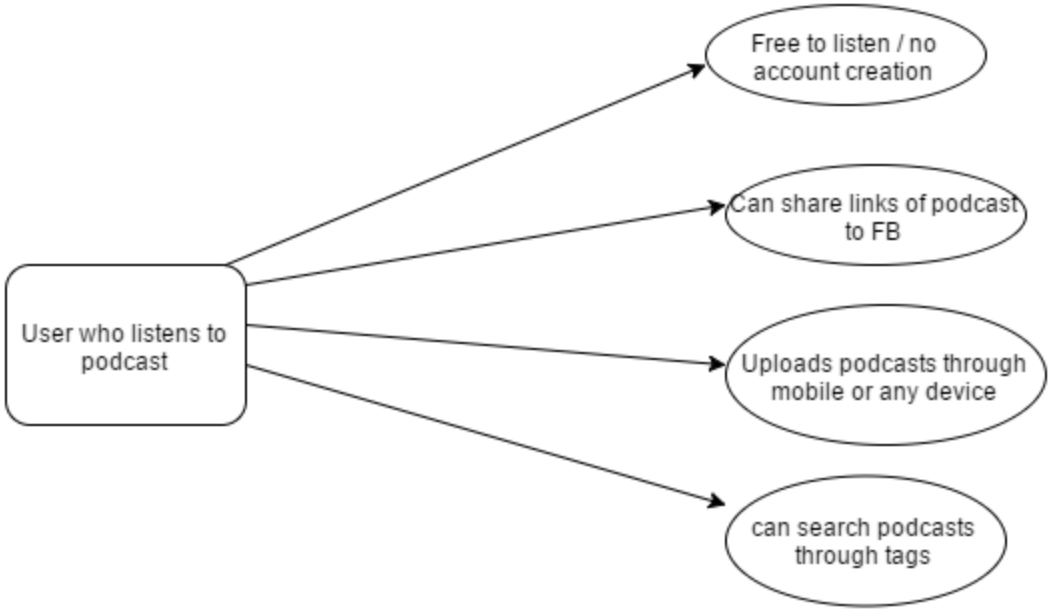
- Web Application
- Suitable for modern mobile browsers
- Compatible for all viewing media screens
- Ability to listen to podcasts of all genres
- Create and start sharing your own podcast or listen to existing ones

Application Scenario

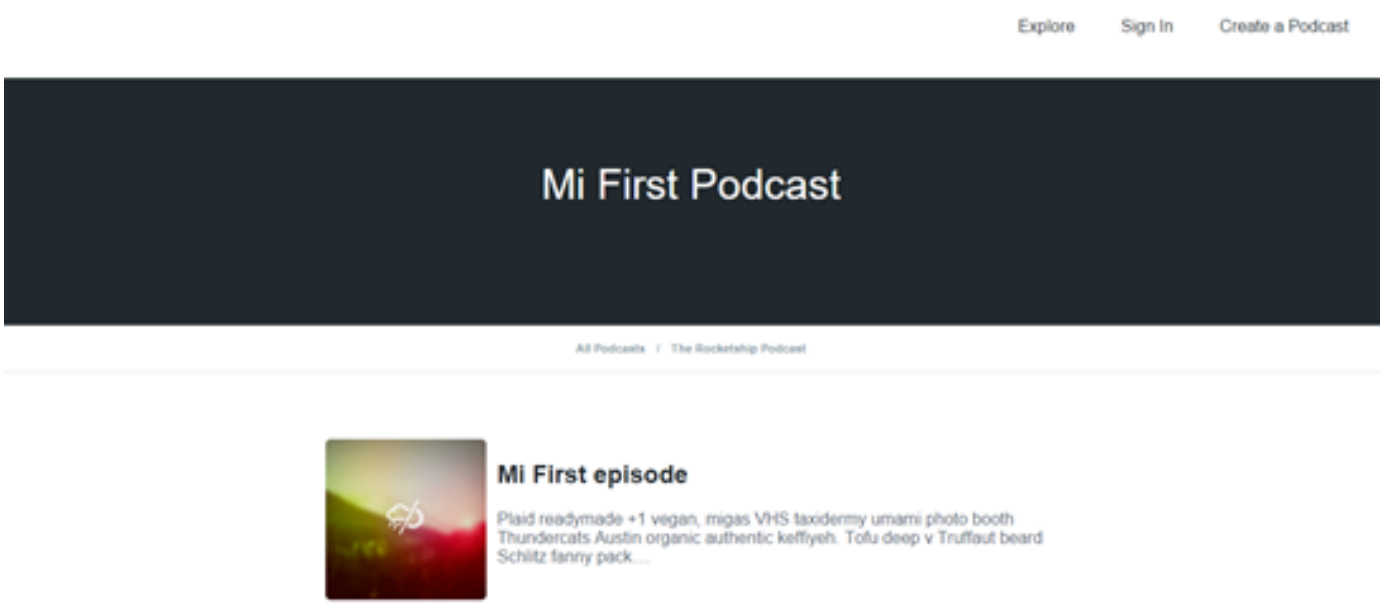
UML



UML of Listener



Mockup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All Podcasts / The Rocketship Podcast
Mi First episode
Plaid readymade +1 vegan, migas VHS taxidermy umami photo booth
Thundercats Austin organic authentic keffiyeh. Tofu deep v Truffaut beard
Schlitz fanny pack....

Technologies

Ruby on Rails

- Web application framework based on ruby language
- Rapid prototype for web development
- Easy to deploy, scalable and readily maintainable
- Possible usage of Facebook or google authentication system

Bourbon family

- An iconic framework for a responsive front-end design
- One of the most lightweight semantic framework that promotes the usage of semantic html syntaxes

Heroku

- Easy to deploy Rails app

Git

- A version control system for easier code management

Technologies

SQLite and PostgreSQL

- SQLite used in development environment
- Postgres used in production as heroku by default uses only PostgreSQL database

Sendgrid

- A mailer application to send out mails for password resets and confirmation of account creation to prevent users from using improper email account

Technologies

Amazon S3

- Persistent storage in the production environment
- Allows users to store audio files
- Highly scalable and has higher rate of caching and serves as a better content deliver network

Code climate integration

- A code review site that helps in maintaining codebase with CGPA
- Rails is based on DRY - Don't repeat yourself concept
- Code climate helps preventing code duplication

Challenges

Support device of all screen sizes & connection issue

- JQuery media player should be feasible across all platforms
- Audio file size should be compressed and small
- Requires user to have data connection or Wi-Fi
- Optimize S3 storage to reduce response time
- Browser compatibility across all devices and browsers

Usability features

- Ease of use to search for podcasts by means of tags
- ability to cancel one’s account along with persistent data

Context awareness

- Higher degree of authentication to prevent users from accessing other users episodes and podcasts
- Getting better responses for search tags on podcasts or give better auto suggestions

Work plan

Follow Agile methodology for development

- Deploying codebase in short sprints to test better and review the application better
- Test the software working at each cycle
- Final cycle involves testing on all browsers across all devices

Questions

Any Questions?

Thank You.