WEB MUSIC PLAYER

VIVEK KUMAR

PROJECT IDEA

Project Goal

Our product is a web based music player that allows users to listen to their music libraries using a server program on their home computer and a web based client to connect to that server and stream the music.

PROJECT IDEA

Target Audience

Our target audience is a computer user who wants to listen to their music remotely without having to carry around a digital music player. Also, the target user has a decently high speed internet connection on both ends of the transaction. The target audience is also skilled enough on computers to install the program and use the web to sign in to our web site and use the web client.

PROJECT IDEA

- Terminology
  - User server: The Java program running on the user's computer that responds to requests from the web client.
  - Web client: The Java applet that runs on the web site that the client uses to listen to their music.
  - Web server: The web site itself (including the Ruby code and the SQLITE database).

MAJOR FEATURES

- Major Features:
  - Play mp3's streamed from the user server to the web client
  - View the music library sorted by various aspects such as: Artists, Album, Genre, Song Title, etc
  - Create, save and modify playlists through the web client
  - Use the user server to choose music to share to the web client
  - User permissions for listening to music (Guest accounts that limit access to songs, etc)
- Minor Features:
  - Encrypted TCP/IP Communication
  - Multi-format support (Ogg Vorbis, FLAC, WMA, etc)
- Future Features:
  - Consolidate music from many different computers together for access from the web client

IMPLEMENTATION

- Programming Languages and Frameworks
  - Java for the web client and user server
  - Ruby on Rails for the web server
  - Swing for the UI
- Data Sources
  - MySQL for the web server
- Version Control
  - SVN for version controls
- Testing Suites
  - JUnit for web client and user server
  - RSpec for general testing

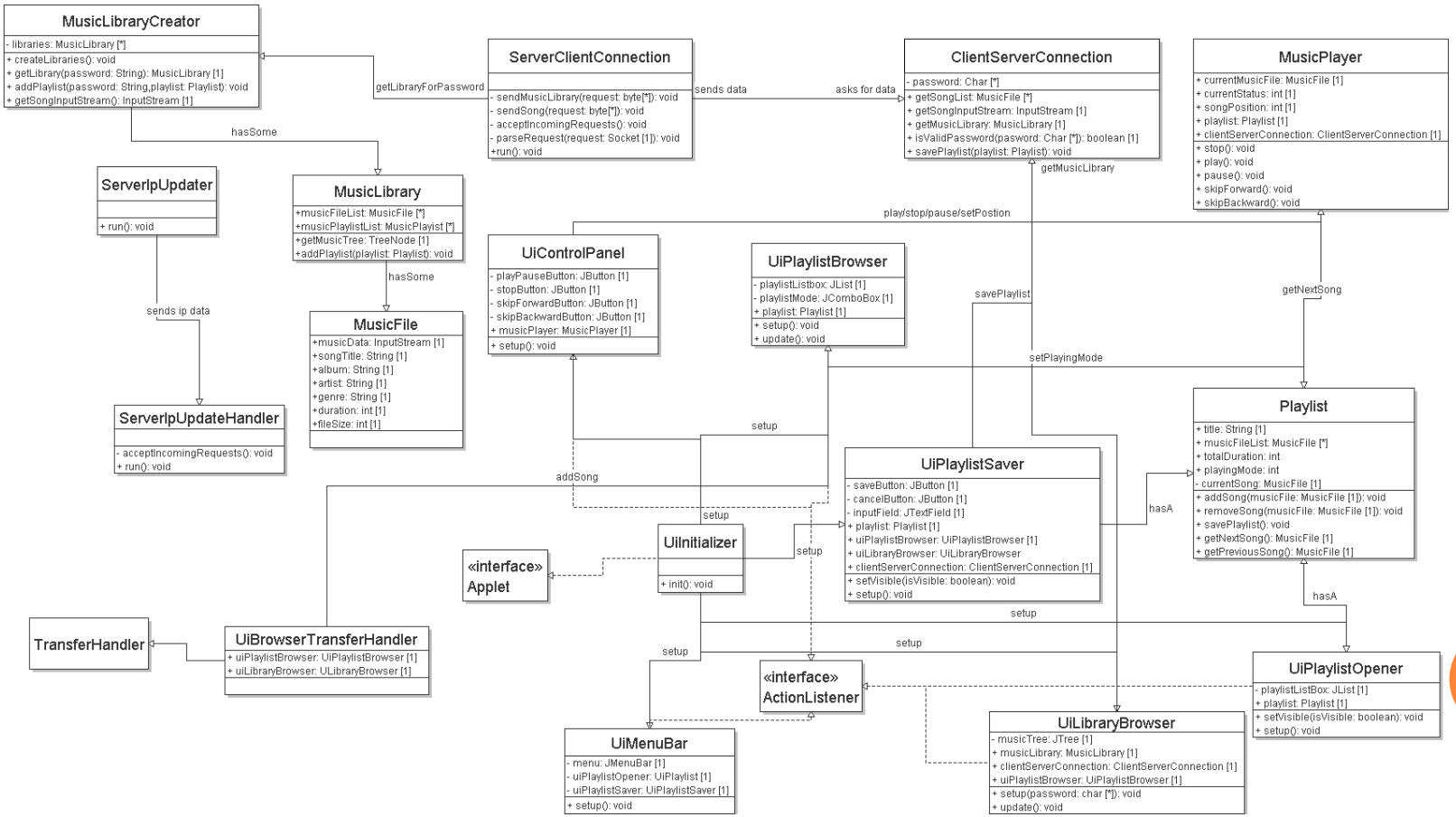
TEAM ROLES

- Feature Teams
  - Eriel: Music Player and music features like playlists
  - Nick: UI
  - Ray: Socket Communication
  - Josh: Web interface/Website
  - V: Server side interaction (loading MP3 data, etc)

- Testing
  - Each person will add unit tests for features they worked on as well as others they didn't work on as new features are added to the product.

DESIGN

- The different features each person is working on are implemented as different classes



DESIGN

- UI Diagrams