

★ Noteable! 🎵

Project 2

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★ Features & Motivation

Motivation/Adjustments:

- Tutorial/Game to learn how to read and play musical notes
- Train ear to associate notes with a value (C4, E, etc...)
- “Free Play” keyboard online

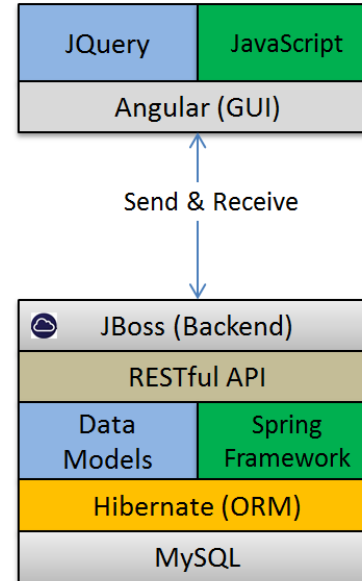
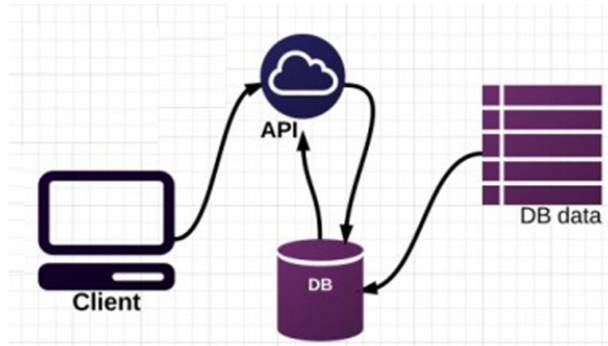
Features:

- Web based Front-end with RESTful Service on back-end
- Progress through tutorials and learn simple songs
- As user completes levels, they will unlock more challenging levels
- Save scores and progress of each lesson

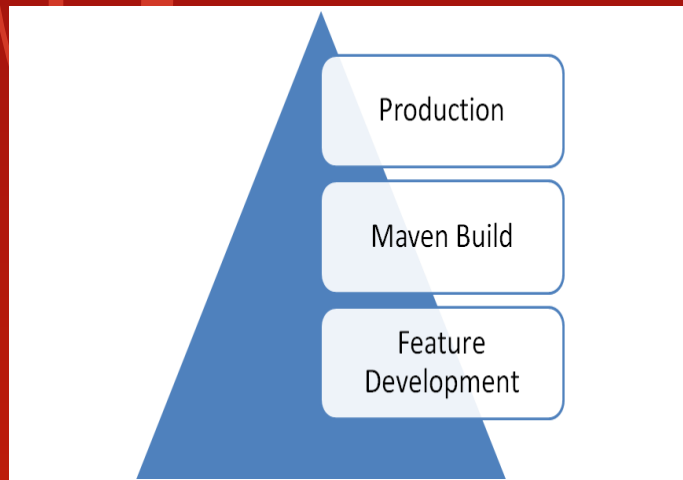
★ Team Progress

- Freeplay and Tutorial proof of concept.
- Base development complete for:
 - RESTful Spring functionality
 - Database Hibernate functionality
 - Spring Data Models
- Cloned/shared development environment
- Investigated GUI APIs to utilize (Angular, etc...)

✦ High-Level Architecture



✦ Release Process

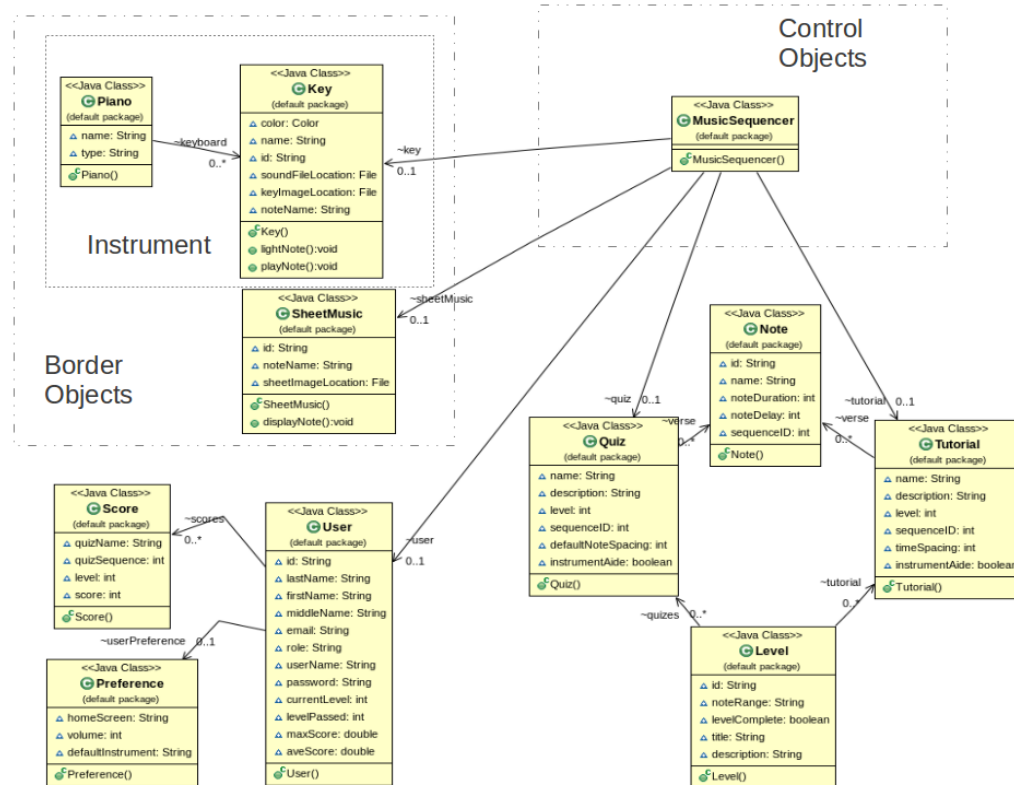


1. Develop Feature on personal branch
2. Create Maven tests
3. Run ALL maven tests
4. If tests pass, deploy to production automatically

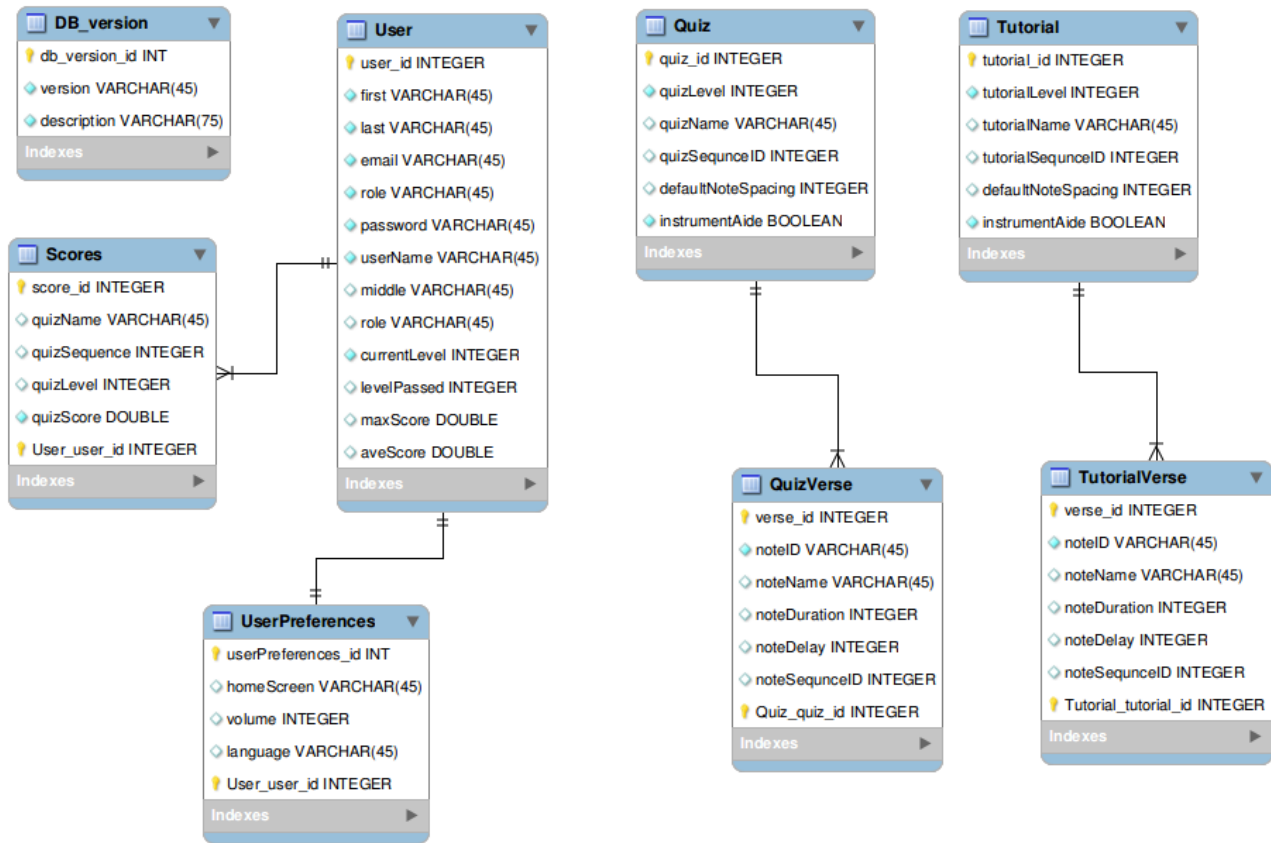
✦ Schedule & Monitoring

Delivery Schedule				
Phase	Start	Finish	Actual	Status
<u>Milestone 1</u>	09/26/2014	10/09/2014		Design Phase
<u>Milestone 2</u>	10/10/2014	10/23/2014		Develop base framework for front & backend
<u>Milestone 3</u>	10/24/2014	11/07/2014		Develop independent components for front and backend
<u>Milestone 4</u>	11/08/2014	11/21/2014		Start Integrating frontend and backend connectivity
<u>Milestone 5</u>	11/22/2014	12/05/2014		Solidify required functionality & minor enhancements

Object/Data Model



✦ DB/Table Model



★ Project Components - GUI View

HTML

- Each key has its own respective DIV and class
- Every note (key) has its own audio tag

CSS

- Each key has a background image of a key image

Javascript/jQuery/Mousetrap

- Contains calls to change class of DIV (key) on mousedown/mouseup
- Changes the view from freeplay mode to tutorial mode
- Includes functions to start and stop an audio file related to each key
- Contains functions to change class on keydown/keyup with mousetrap.js

User Stories

- Pressed key appearance, play a note using mouse, keyboard view

Project Components - UI Continued

- Use REST api calls to interact with the back end
 - Front end in entirely separate code base
 - HTTP Verbs: GET, PUT, POST, DELETE
- Use angularJS to update views. The main advantages of angular for this project are
 - Two way data binding
 - Templates
 -

✦ Demos

★ The End!

THANK YOU!

★ Risk Management Plan

- Key Elements prior to executing Plan
 - Define work scope, schedule, resources, and cost elements
 - Define minimum and maximum baseline thresholds
 - Define Risk Management Roles and Responsibilities
- Identify Risks
 - Each team member submits top 2 or 3
- Rank Risks
 - Probability (1-5)
 - Operational Impact (1-5)
- Mitigation Strategy
 - Med and high risks only
- Contingency Strategy

★ Coding Standards

- Why?
 - Greater consistency between developers
 - Easier to understand
 - Easier to maintain and develop
 - Promotes code reuse vs. scrap and re-write
- Industry Standards
 - Comments
 - Naming Convention
 - White Space
- 4 Sections
 - JAVA, JavaScript, HTML, and MySQL

✦ Quality

- Verify acceptance criteria per user story (demo)
- Build tests for each functional component developed
- Use Maven to build and deploy
- Develop central logging to simplify debugging
- Design RESTful data packets to simplify parsing
 - less code paths