Music Tutor

By - Sachin Grover and John Mints

What to follow?

- Intent of the Tutoring System.
- Approach and complete tutor analysis.
- Technical Details and Division of Work.
- Timeline.

Music Tutor - Intent

Everyone loves music. The intent of the tutoring system is to provide everyone (who can read) means to be able to learning sheet music.

Sheet Music - The symbols which represents music written on a sheet of paper.

Intent (Continued)

Music is one of the most common form entertainment.

So, our tutor, to learn symbols can be used by anyone who can read English (as that is the primary mode of communication).

As music is form of entertainment, people would be self motivated.

Approach - General

Division - Since we are working on a very general topic. We have planned to add some articles which will be like the lessons for each student. The lessons will be divided into levels. For eg:

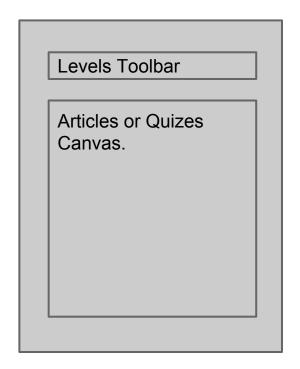
- Level 1 understanding the basic symbols.
- Level 2 understanding the scale and notes and how symbols represent them.

The levels continue like this and the exact division is yet to be decided.

User Interface

UI will be in the form of a canvas.

It will be used to present the articles as well as quizzes.



Assessment

Quizzes after each lesson will be the primary method of assessment. Quiz will be asked in two forms:

- Show the symbol and ask the user to fill the letter/representation of the symbol.
- Match the following questions.
- After some proficiency we will also add sounds to test if they have started connecting sound to the symbols they have read in the article.

Once a user will complete a level with satisfactory answers he would be allowed to proceed to the next level.

Step Analyzer

Depending on the assessments which are in two forms the step analyzer will be answer based (as there is no procedure in the answer). The wrong solution will be sent to the pedagogical module, which will present the feedback to the user.

Pedagogical Module

The feedback will be presented directly to the answer. If the answer is wrong:

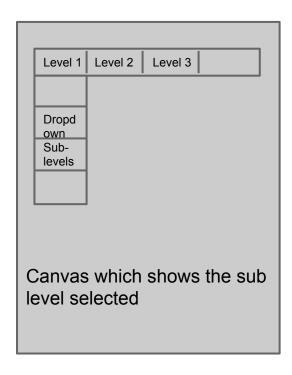
- The PM will provide basic hints to look at the symbol presented to lead him to the right answer. Then there will be a bottom out hint as well at the end.
- Feedback of the answer (whether the answer is right or wrong) will be provided by the marking the box red (wrong) and green (right).
- There will be a hint button for the user which will be the same hints given on a wrong answer.

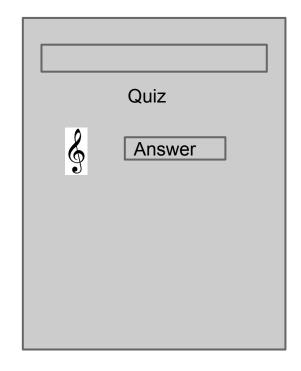
Task Selector

Tasks will be in the form of lessons/levels. The order of the tasks will be predefined.

Once a user has answered the quiz questions and hence is thorough with the level, only then he will be allowed to go to the next level.

Rough Wireframes to show the UI





Technical details

Previous slides show the main pages of the Tutor. The tutor will be browser based as then it can be used by anyone.

The main functionality will be written in JAVA based language with major framework already created. The front end will be made using JSP and Java Script.

Division

The division will be based on the modules. The major modules are

- 1) Canvas and drop-down menu. John
- 2) Article rendering and Quiz presentation. Sachin
- 3) Answers checking and feedback rendering and functioning of hint button. Both
- 4) Content creation which involves articles, questions, feedback and hints. Both

Timeline

April 7th - End of major coding and sanity testing.

April 20th - Content Creation and end to end testing.

April 30th - Complete flow/End user testing.

Thank you