

Music Tutor - Proposal

Music Tutor will be used to teach people Sheet Music. It can be used by anybody who wants to learn read music and not just play it. Even musicians face difficulty while reading music. They might know how to play it but to read it from a book and then play it requires some theoretical knowledge. Our system will try to fulfil this gap in the best way possible.

Overview -

Music Tutor will be divided into levels, which will be further divided into sub-levels. Each sub-level will include an article explaining the theory. It will be followed by few tasks to test the mastery of the article by the user. Only after completing the task will the sub-level be assumed complete. Now we will present a complete detail of the system, to include all the 5 major modules of an Intelligent Tutoring System.

User Interface -

This will be a form based UI and not a Canvas based UI (as mentioned in our ppt) as there is no drag and drop functionality in our case. The UI will be divided in the top catalogue showing the levels or lessons that are available for the user. A dropdown will show the sub-levels or modules or tasks which a user needs to complete before going to the next level. A level will be divided into reading an article and then doing questions based on the article.

Step Analyzer -

After each lesson users will be asked to work on tasks to test their understanding of the article. Tasks will be in the form of

- multiple choice questions,
- match the following and
- enter the answer in the box.

There are no procedures in understanding sheet music so the System will be answer based. Step Analyzer will check the answers correctness and will pass the result to Pedagogical Module.

Pedagogical Module -

It will be responsible for providing the feedback to the user. It will present the immediate minimal feedback of Red/Green based on the answer is wrong/right. If the answer is wrong then the user will be given sequential hints to reach the final answer. First hint will be to explain the properties of the character. The hints will gradually go towards the right answer finally providing the bottom out hint.

There will be a Hint button as well. It will have the same functionality as a wrong answer, i.e. it will give gradual hints to reach the answer and then at the end will be a bottom out hint.

Assessor -

Through different form of tasks for the user, Assessor will test the domain knowledge of the user. This assessment will be used by the system to decide when to send the user to the next level. The user will be allowed to go and work on the next sub-level only after he has successfully answered all the tasks and to the next level only after he has successfully finished all the sub-levels.

Task Selector -

Order in which the tasks are presented will be fixed, and the user will go to the next sub-level after finishing all the tasks under a sub-level. After completing all the sub-levels, he can move to the next level. So the tasks selection will fall under the category of Non-adaptive - fixed order of the tasks.