

Criterion A: Planning

Defining the Problem

My client, Ms. Vinsen, is an art teacher at Pradita Dirgantara High School. She wants to start teaching the basics of music and how to play the instrument. She will start by providing as much music vocabulary as possible and show the steps to play each instrument in an accessible and non-boring manner for students. It's not easy for her to find a way which will be entertaining and educational for the students.

In November, 2022 Ms Vinsen asked me her problem and we discussed it during the break time. She described what she wanted: to have an application with a friendly interface and easy to use because it would make students learn comfortably. Also, the teacher can add and update the material.

As we discussed her problem, I thought that it was a good idea for my Internal Assessment because Ms Vinsen wanted to have an application which is related to IT solutions for her problem. In order to analyze this issue, I decided to meet Ms Vinsen to have an interview and find out details for my future application.

Rationale for Proposed Solution

To solve Ms Vinsen's problem, I think that using a Java program with Netbeans is the effective and familiar way. It is possible to separate the sections for teacher as admin and students. Ms Vinsen as the teacher will be able to input the keyword, spelling, and meaning for the dictionary and keyword, part of the instrument, and the steps for the instrument steps.

For students, there will be a dictionary of music vocabulary. Besides it, the application will provide steps on how to play an instrument. To make it easier, there will be a search box for students to be able to search the keyword easier.

According with these requirements, I decide to make my application in Java because of:

- I am learning it at school
- With help of Apache Netbeans 12.6 and it is already provided.
- With help of XAMPP and MySQL
- With Graphical User Interface that has much easier features to use for beginners such as delete, edit, button, open window, etc, with drag and drop method.

Success Criteria

1. It will be easy and non-boring for kids to see the dictionary and step instructions.
2. Application will provide a friendly interface for teachers and for kids as there will be shortcuts.
3. Application will allow students to search the keyword that they want and the program will display it from the database into the text area.
4. Application will allow only admin to add activities, change/edit, and delete into the database.

Word count: 431
