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ClaritEar MOBILE APPLICATION

Unified Modeling Language

Version 1-0-1

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A. UML Diagram

To fully understand about ClaritEar project, we make some UML Diagram to help people know our project better in many perspectives. UML Diagram is basically used for designing our project's system. In our project, which is 'ClaritEar Mobile Application', we made some UML Diagram that can help people the architecture of 'ClaritEar Mobile Application', here are the diagram :

1. USE CASE DIAGRAM

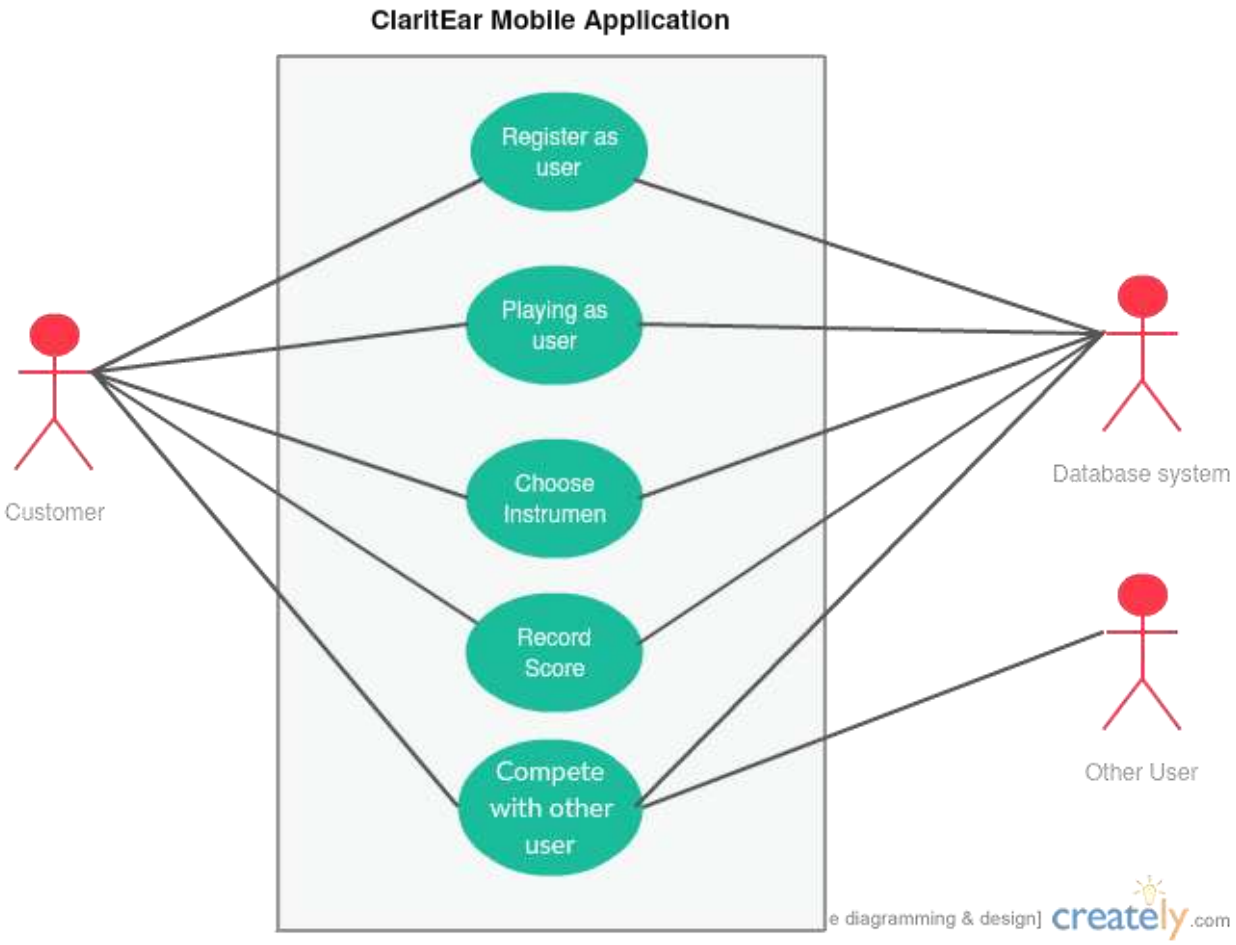

Figure 1. Use Case Diagram

Use case diagram is a graphic depiction of the intersection among the element of a system. A use case is methodology used in system analysis to identify, clarify, and organized system requirements. It can be used to describe the functionality of a system in horizontal way. In use case diagram, there are 4 major elements: the actors that the

system you are describing interacts with, the system itself, the use cases or services that the system knows how to perform, and the last is the lines that represent relationship between these elements.

In use case diagram that we have made in figure 1, we think that user can register as ClaritEar mobile application's user and play the games by guessing the chord which the user already choose what instrument to play the games. The application also can record the high scores and update the scores to the database and compare it to other user's hisgh scores.

2. Activity Diagram

Figure 2. Activity Diagram

Activity diagram is UML behavior diagram which shows flow of control or object flow with emphasis on the sequence and conditions of the flow. The actions coordinated by activity models can be initiated because other actions finish executing, because objects and data become available, or because some events external to the flow occur. In activity diagram there are some following nodes and edges that typically drawn on it: activity, partition, action, object, control, activity edge.

3. Sequential Diagram

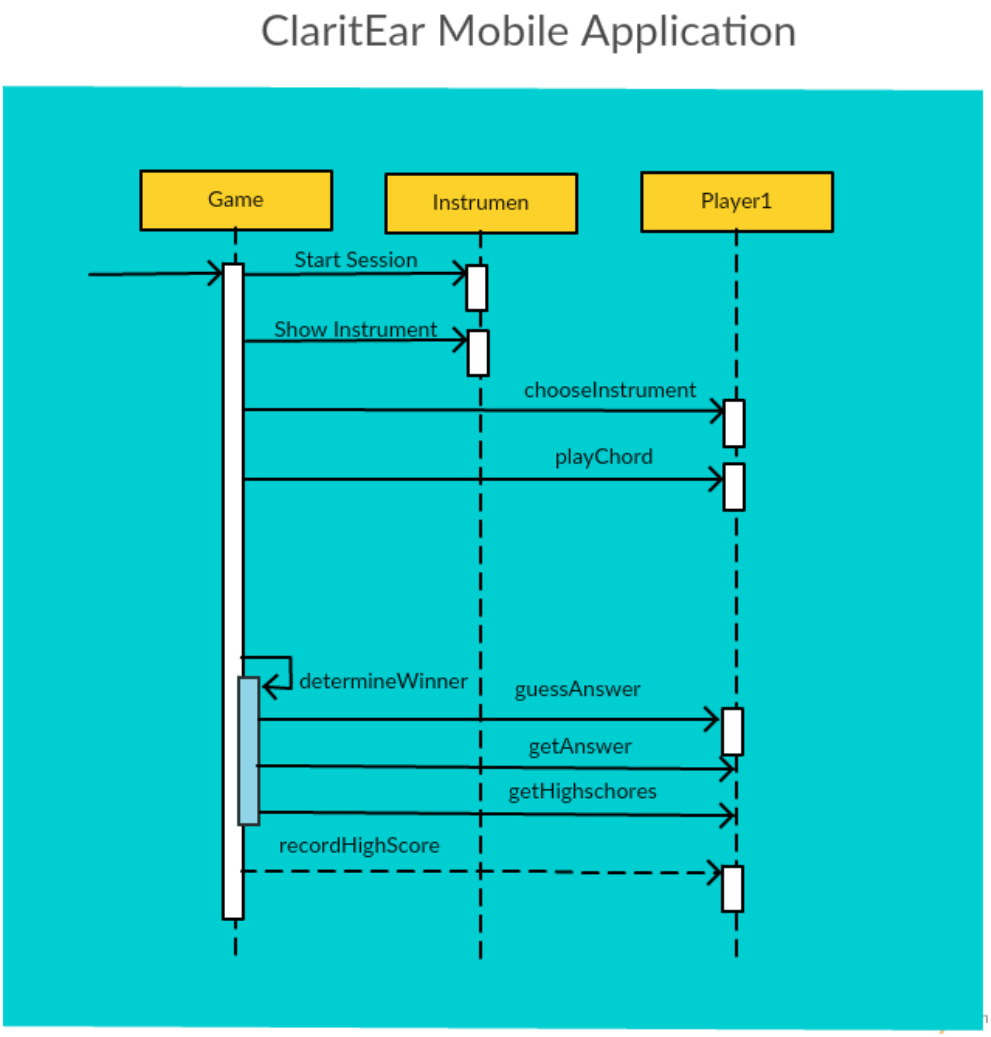

Figure 3. Sequencial Diagram

Sequential diagram is UML behavior diagram which shows flow of control or object flow with emphasis on the sequence and conditions of the flow. The actions coordinated by how the program will execute when user needed. Sequential diagram show the connection between the content in our project.

4. Class Diagram

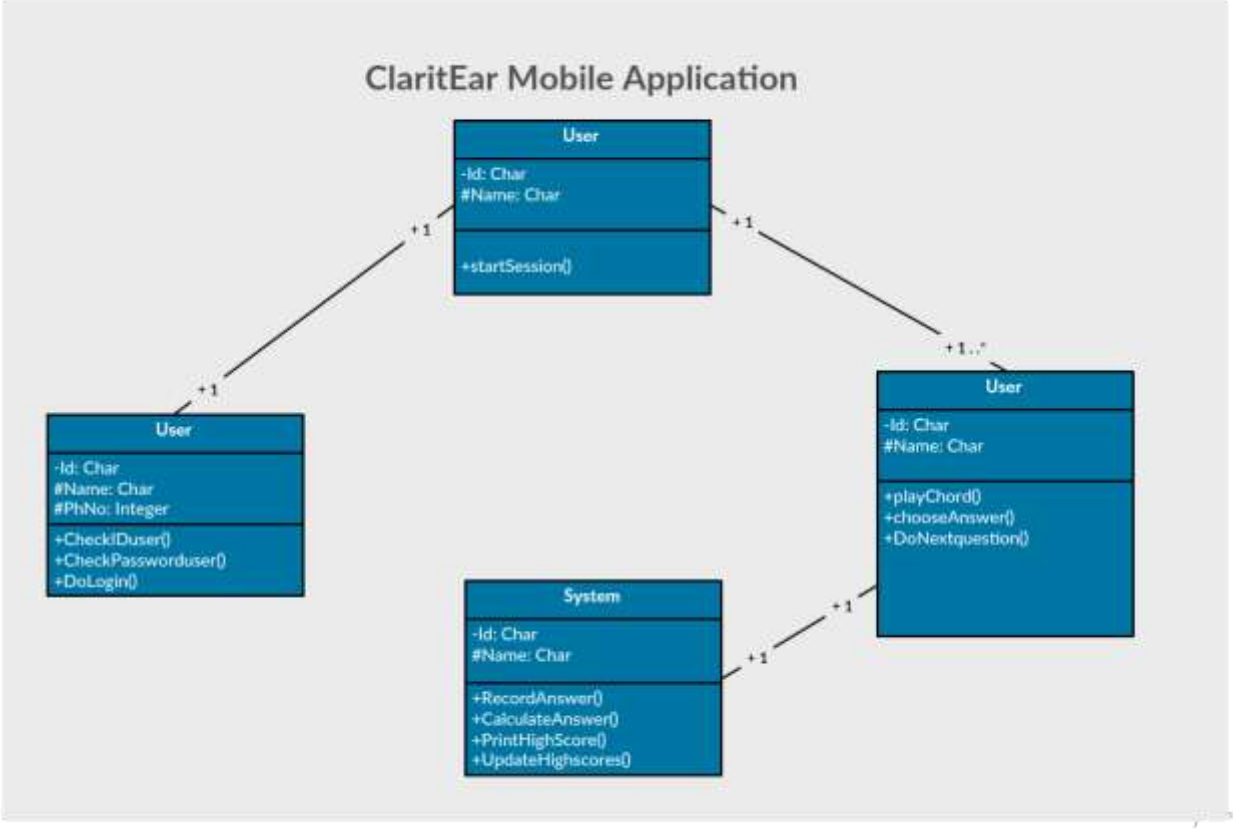

Figure 4. Class Diagram

The purpose of the class diagram is to model the static view of an application. The class diagrams are the only diagrams which can be directly mapped with object oriented languages and thus widely used at the time of construction. The UML diagrams like activity diagram, sequence diagram can only give the sequence flow of the application but class diagram is a bit different. So it is the most popular UML diagram in the coder community.

5. Deployment Diagram

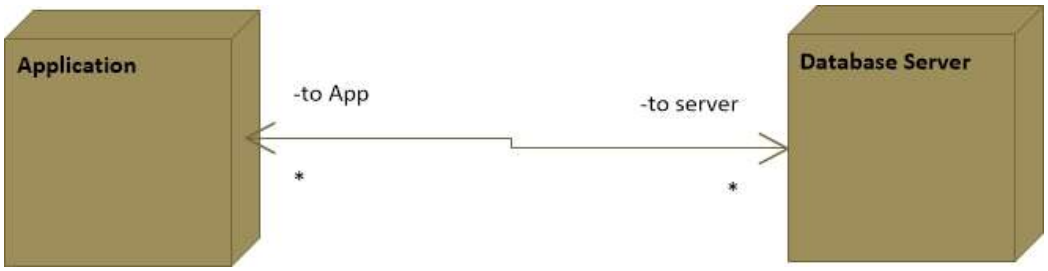

Figure 5. Deployment Diagram

Deployment diagrams are used to visualize the topology of the physical components of a system where the software components are deployed. So deployment diagrams are used to describe the static deployment view of a system.In CLARITEAR application, the system will generate the selection situation from user to database system.

6. Package Diagram

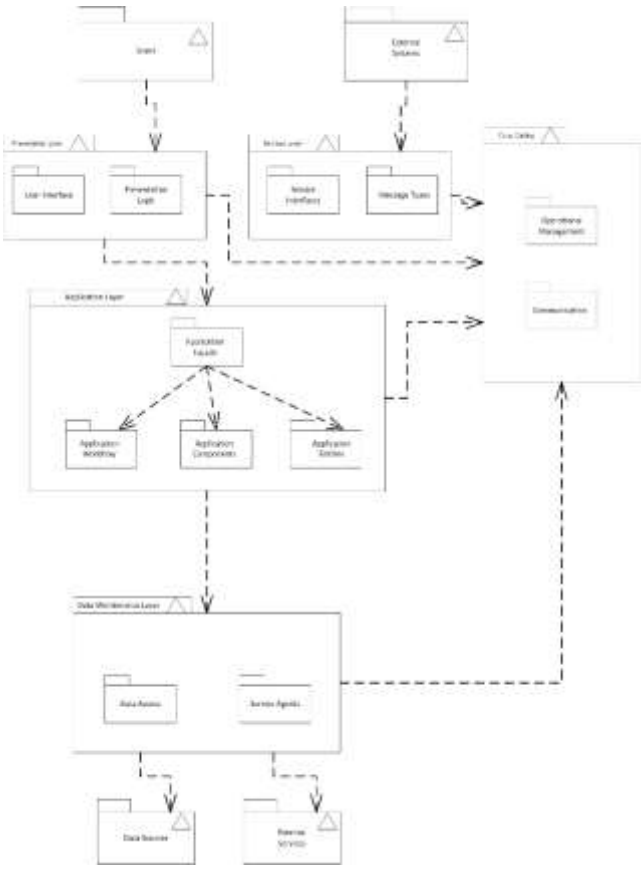

Figure 6. Package Diagram

Package diagram is UML structure diagram which shows packages and dependencies between the packages. Model diagrams allow to show different views of a system, for example, as multi-layered application.

7. Component Diagram

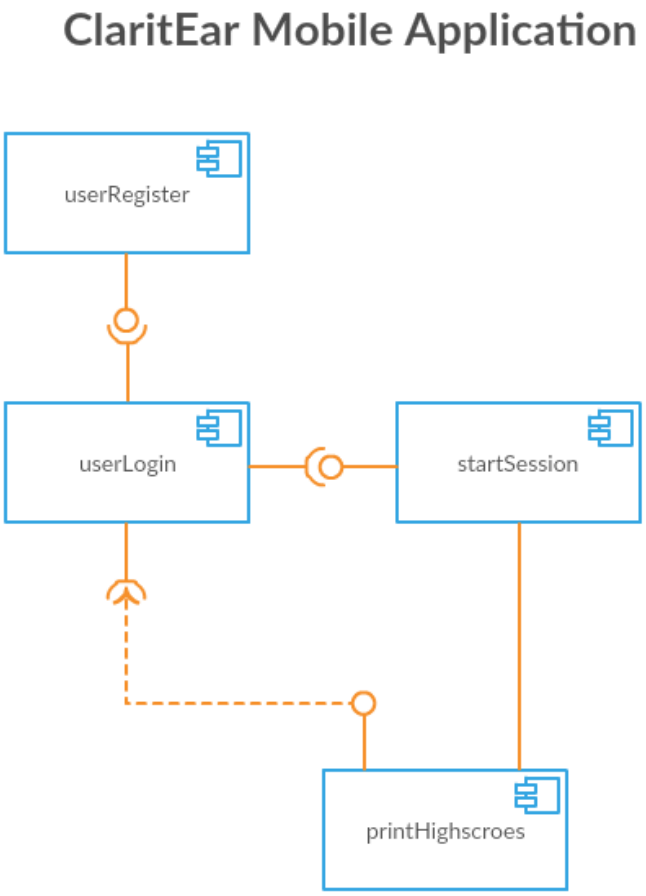

Figure 7. Component Diagram

The purpose of the component diagram can be summarized as:

1. Visualize the components of a system.
2. Construct executables by using forward and reverse engineering.

3. Describe the organization and relationships of the components.

In ClaritEar application, we have 3 package in the system. First we had interface package for user. So user will easily use the application. Second is get situation packaga, where user can select situation. Last one is database access to get sample question for situation that every user choose.