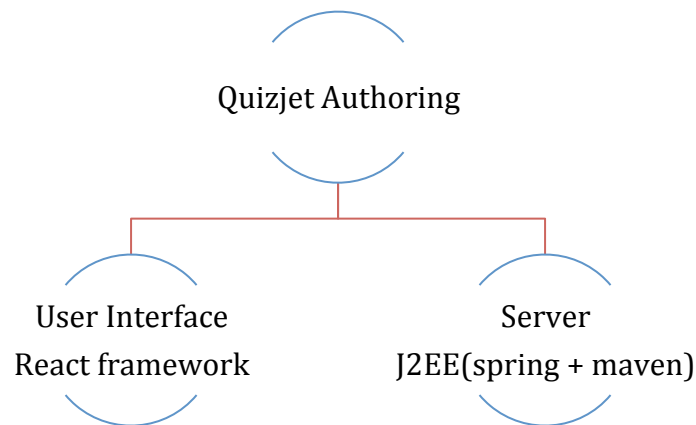


# System Architecture

The main objective of this authoring tool is to help instructor create questions which can be used in quizjet system. The architecture is shown in the following figures.

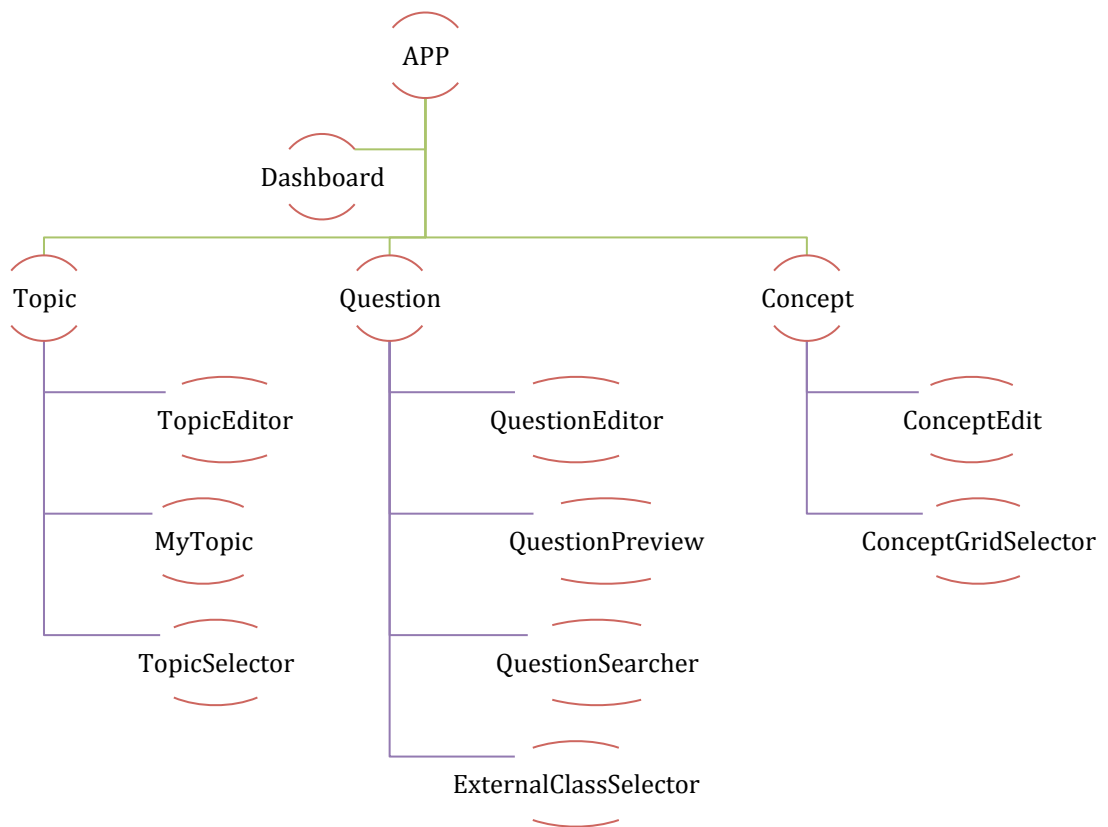


The user interface is implemented using React framework from facebook. The server is implemented using Java. It involves two major framework Spring and Maven.

## 1 User Interface

React is a JavaScript library for creating user interfaces by Facebook and Instagram. Many people choose to think of React as the V in MVC. It wraps closely related elements into a component, which can be reused.

The entry of the User Interface is called “APP” component. It has a child component “Dashboard” which hosts all the other unit components in the system. The unit components can be classified into three categories: Topic, Question and Concept. The framework is shown below.



### **Topic:**

TopicEditor: the topic editing interface

MyTopic: display all your topics

TopicSelector: when you create a question, you need to select a topic. This is what this component does.

### **Question:**

QuestionEditor: the question editing interface:

QuestionPreview: provide a user interface that you can preview the question as a student

QuestionSearcher: search the question by topic, title, description and author name

ExternalClassSelector: upload and select external java class files

### **Concept:**

ConceptEdit: the concept editing interface

ConceptGridSelector: select concepts so that you can add to your question.

## 2 Server

