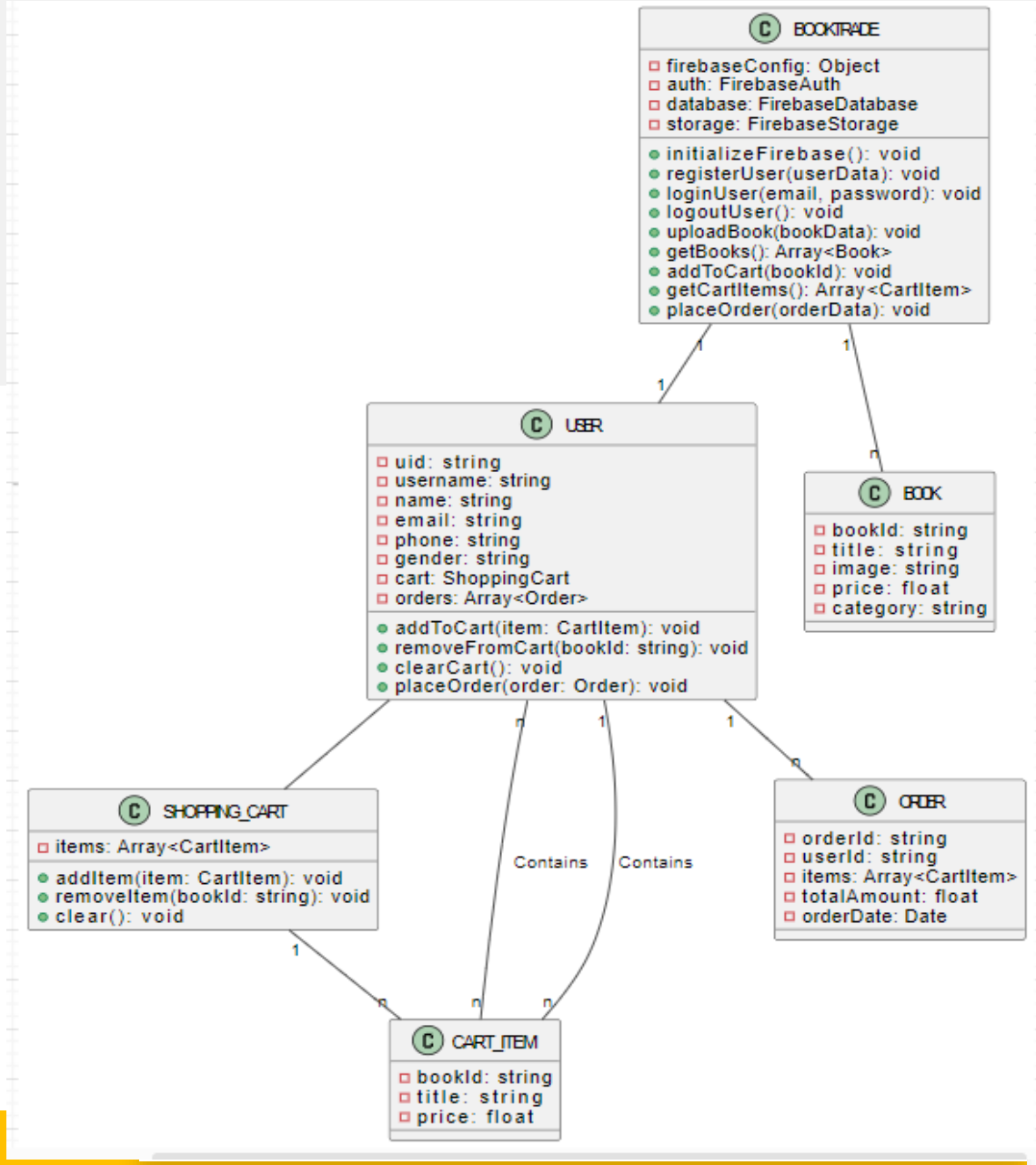
UML Diagrams for our Website

BookTrade

Class Diagram

- A class diagram in the Unified Modeling Language (UML) is a type of static structure diagram that describes the structure of a system by showing the system's classes, their attributes, operations (or methods), and the relationships among objects.

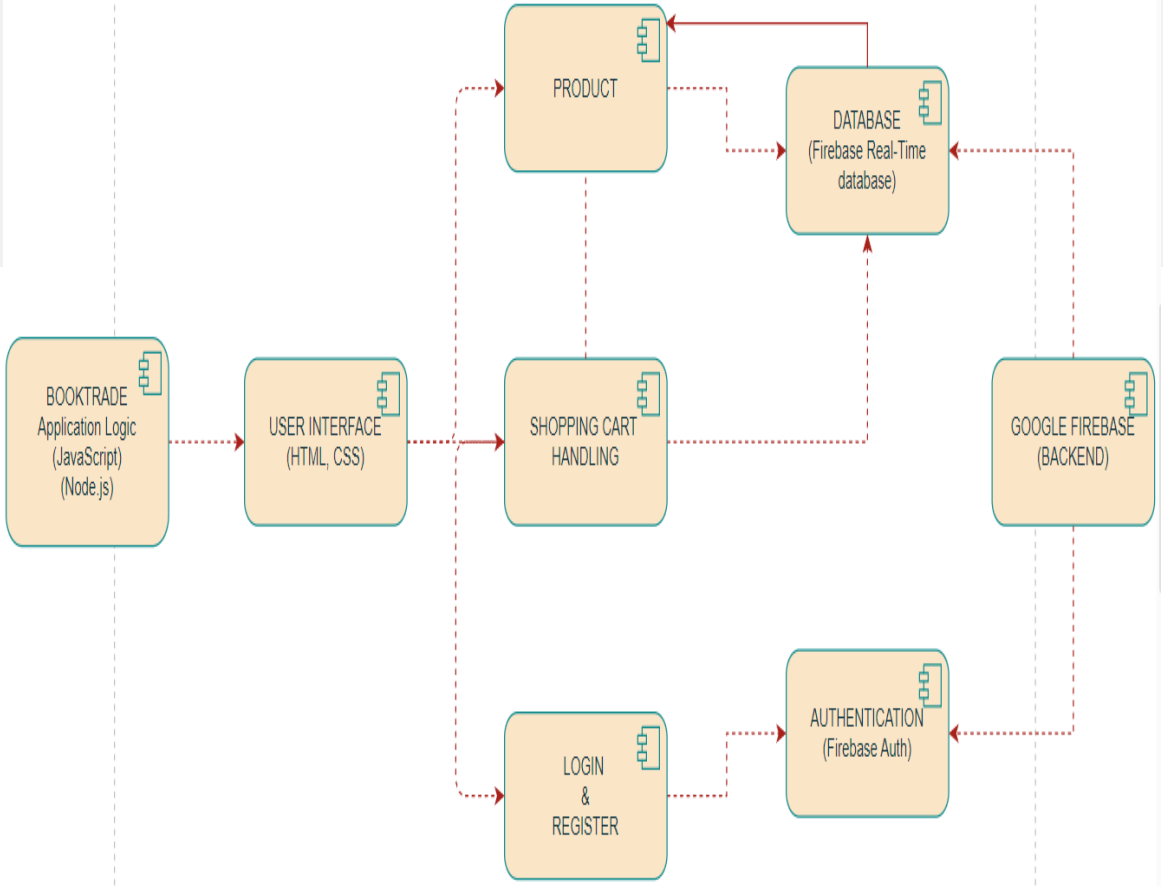
- The class diagram is the main building block of object-oriented modeling. It is used for general conceptual modeling of the structure of the application, and for detailed modeling, translating the models into programming code.



Component Diagram

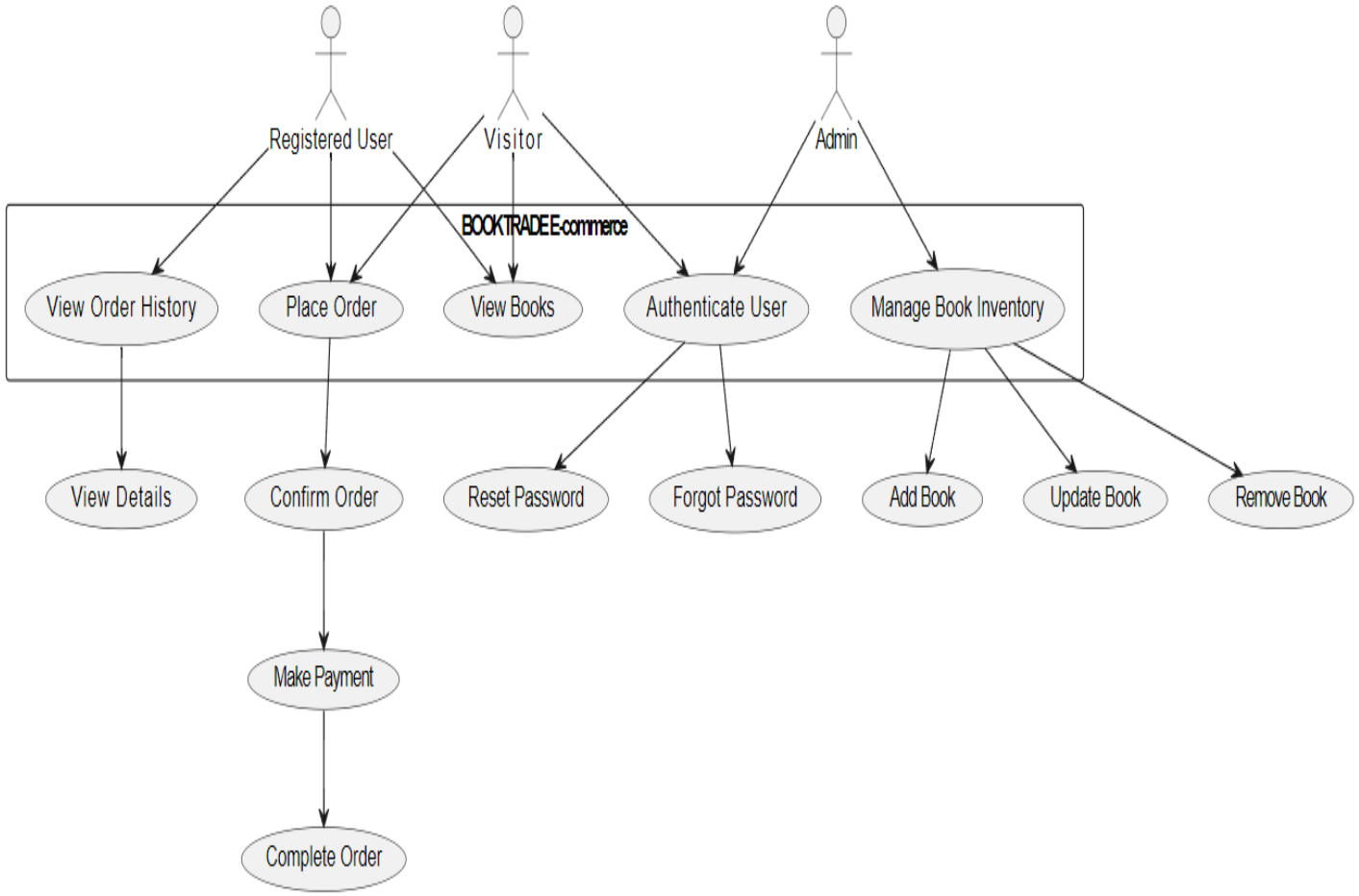
- In Unified Modeling Language (UML), a component diagram depicts how components are wired together to form larger components or software systems. They are used to illustrate the structure of arbitrarily complex systems.

- A component diagram allows verification that a system's required functionality is acceptable. These diagrams are also used as a communication tool between the developer and stakeholders of the system. Programmers and developers use the diagrams to formalize a roadmap for the implementation, allowing for better decision-making about task assignment or needed skill improvements.



Use Case Diagram

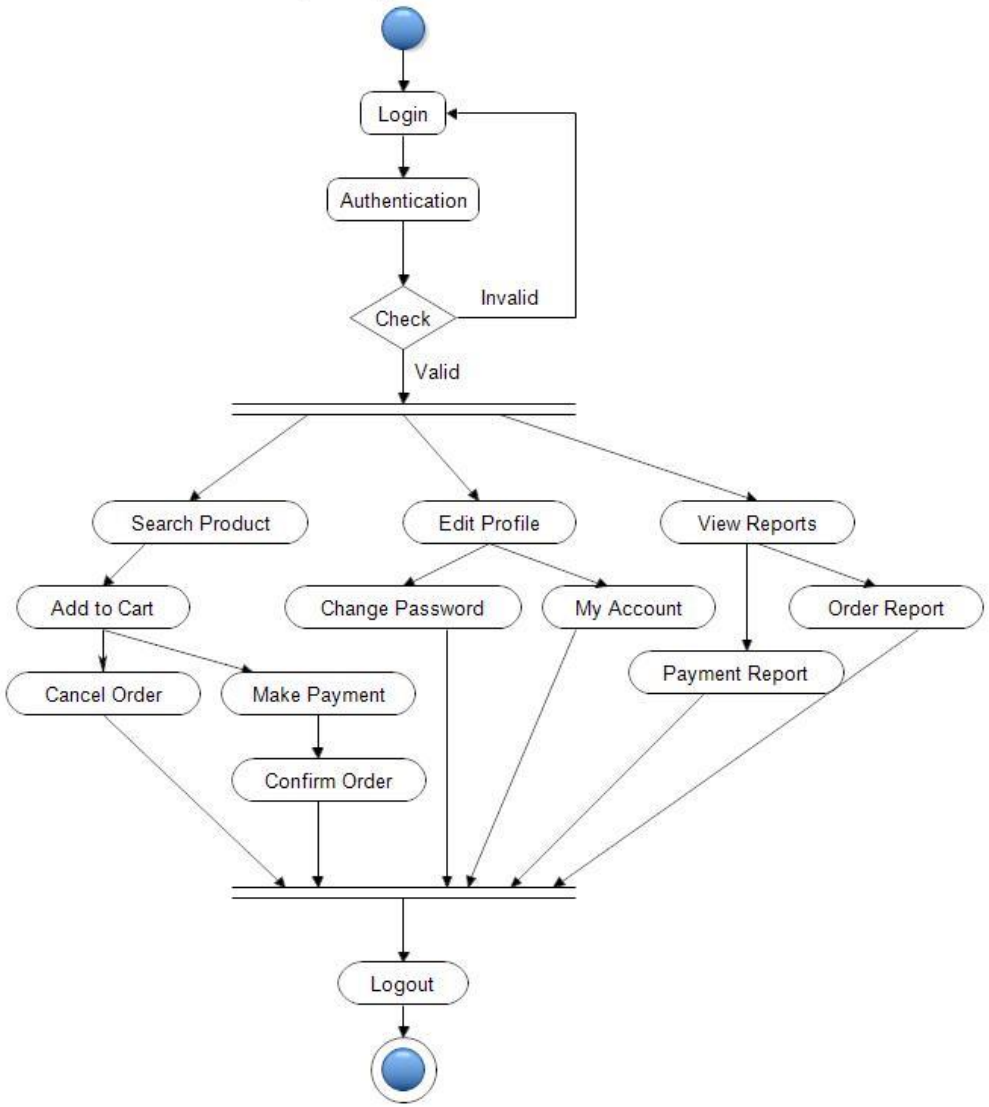
- A **use case diagram** is a graphical depiction of a user's possible interactions with a system. A use case diagram shows various use cases and different types of users the system has and will often be accompanied by other types of diagrams as well. The use cases are represented by either circles or ellipses. The actors are often shown as stick figures.



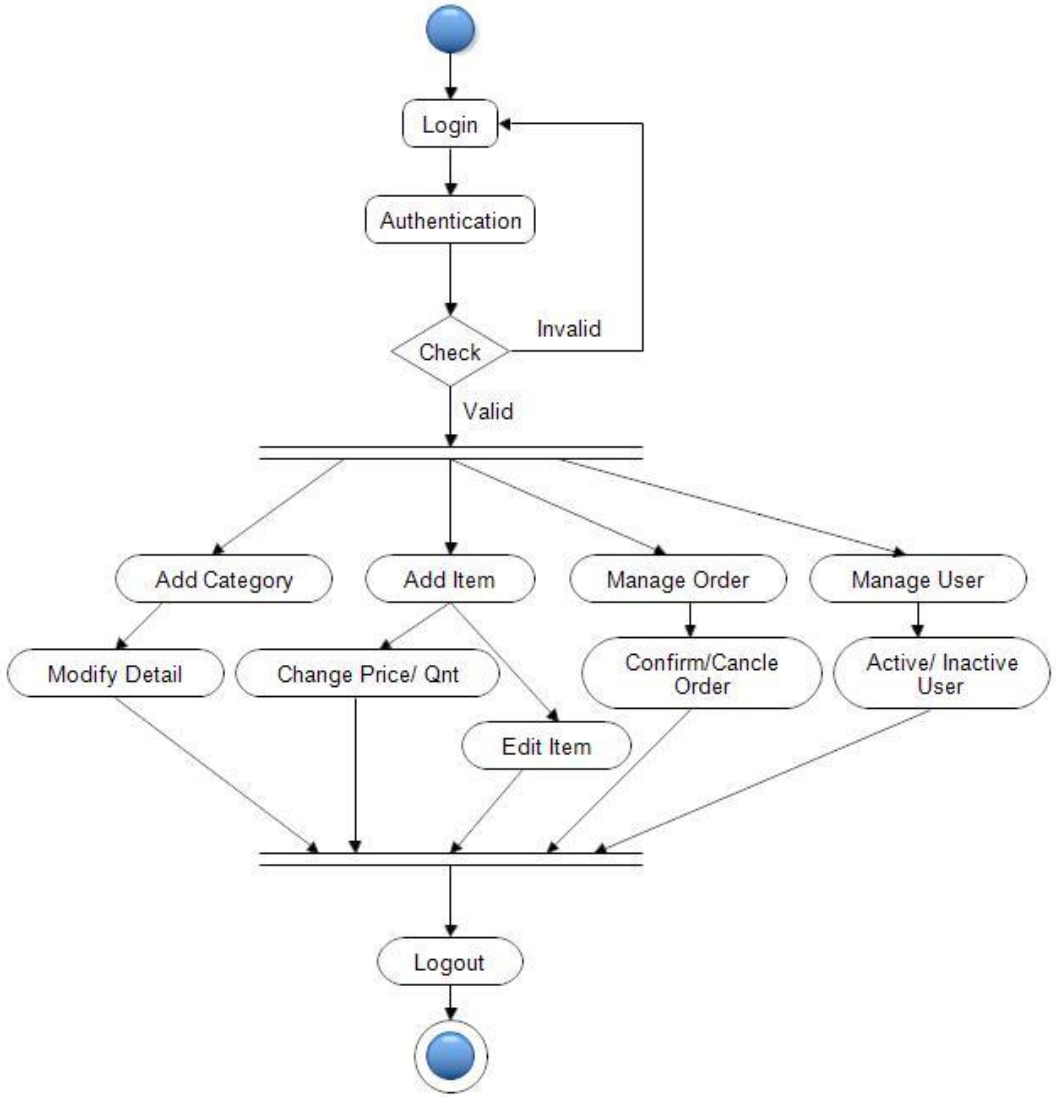
Activity Diagram

- Activity diagrams are graphical representations of workflows of stepwise activities and actions with support for choice, iteration and concurrency.
- In the Unified Modeling Language, activity diagrams are intended to model both computational and organizational processes (i.e., workflows), as well as the data flows intersecting with the related activities.
- Although activity diagrams primarily show the overall flow of control, they can also include elements showing the flow of data between activities through one or more data stores

Activity Diagram for User Side



Activity Diagram for Admin Side



Sequence Diagram

- A sequence diagram or system sequence diagram (SSD) shows process interactions arranged in time sequence in the field of software engineering.
- It depicts the processes and objects involved and the sequence of messages exchanged between the processes and objects needed to carry out the functionality.
- Sequence diagrams are typically associated with use case realizations in the 4+1 architectural view model of the system under development. Sequence diagrams are sometimes called event diagrams or event scenarios.
- For a particular scenario of a use case, the diagrams show the events that external actors generate, their order, and possible inter-system events.

Sequence Diagram for BookTrade