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# Software Requirements Specification

for

## ROBOTIC APP

Version 1.0 approved

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# **1. Introduction**

## **1.1 Purpose**

An application that contains the largest variety of companies and programmers who have a relationship with robotics and artificial intelligence in order to provide the best opportunities for engineers and to facilitate finding a person or company that specialized in the field of robotics and artificial intelligence and to ensure the implementation of innovative projects and ideas with high quality.

## **1.2 Document Conventions**

The priority in implementing the project is that it is divided into two categories, the first is a service provider and the second is looking for a service, where the service provider is either companies or individuals who have a relationship with robots or artificial intelligence.

## **1.3 Product Scope**

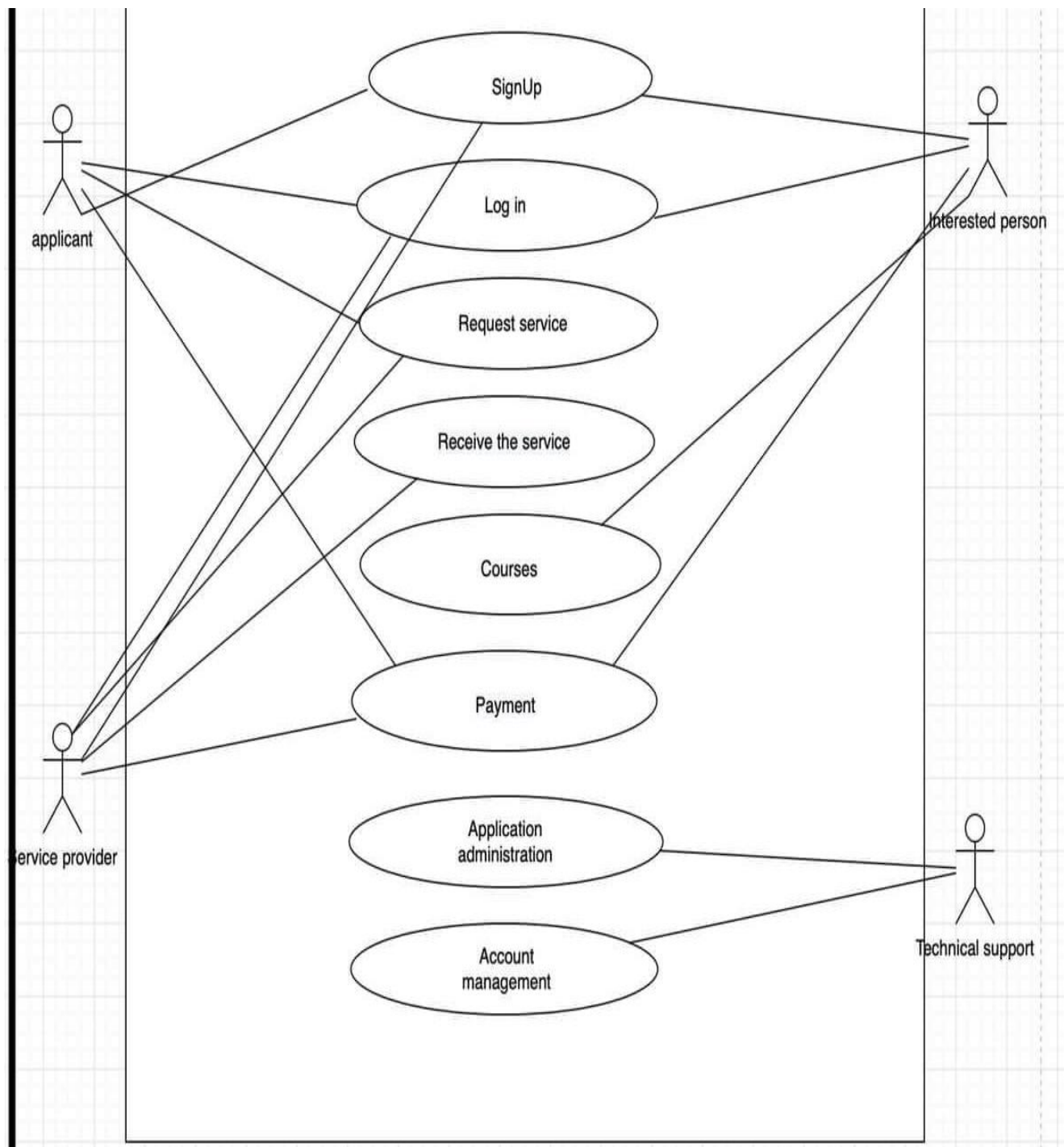
Is a platform that provides a service for hiring programmers, developers of robots and artificial intelligence and contributes to the speed of implementation of high-quality technical products and robots by linking the client with the proper engineer or company to implement his project, which saves time and effort on the client, the idea of the platform comes as being unique as there is no platform that brings companies and individuals specialized in the field of robotics and artificial intelligence in one place to serve the customer.

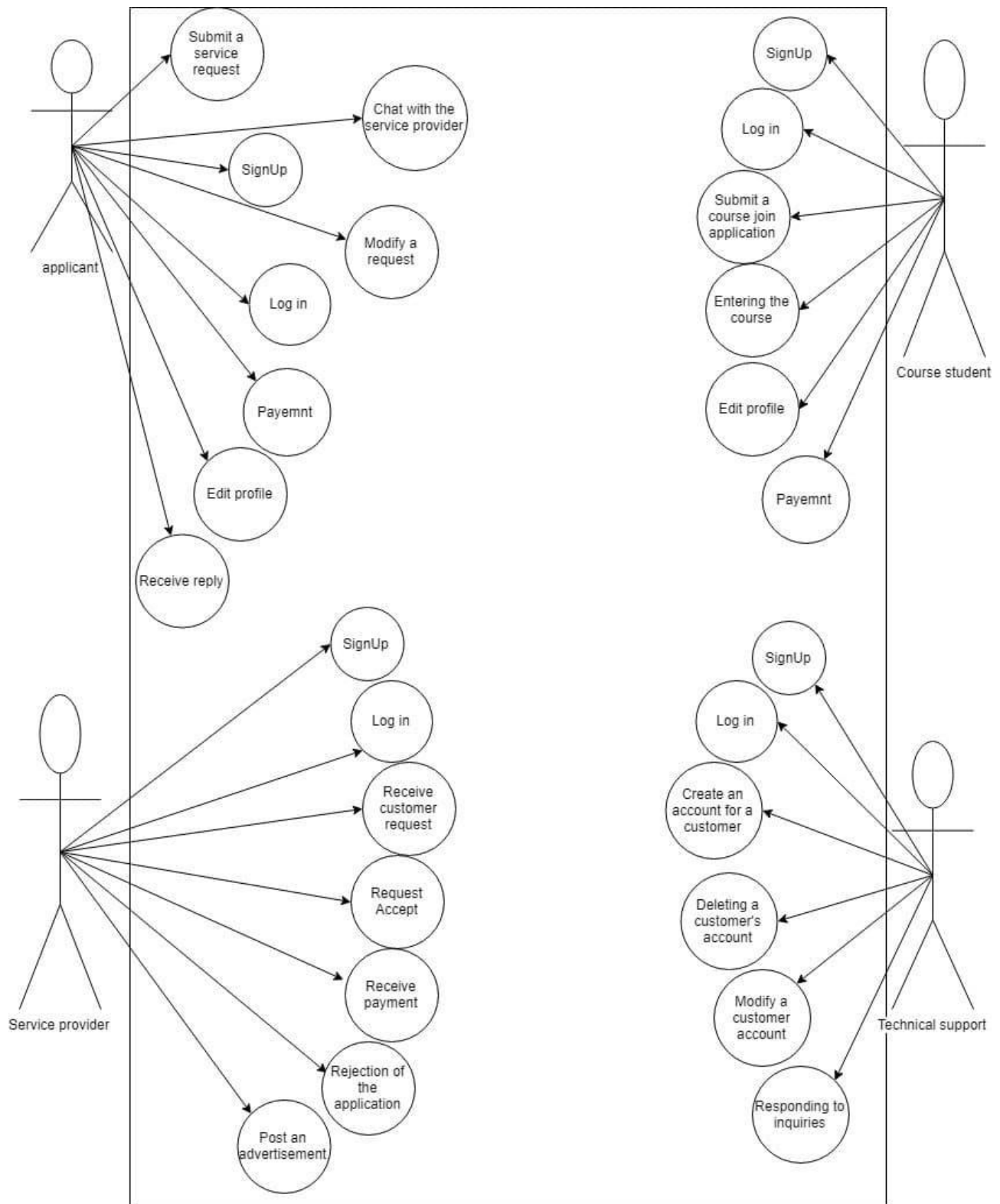
# **2. Overall Description**

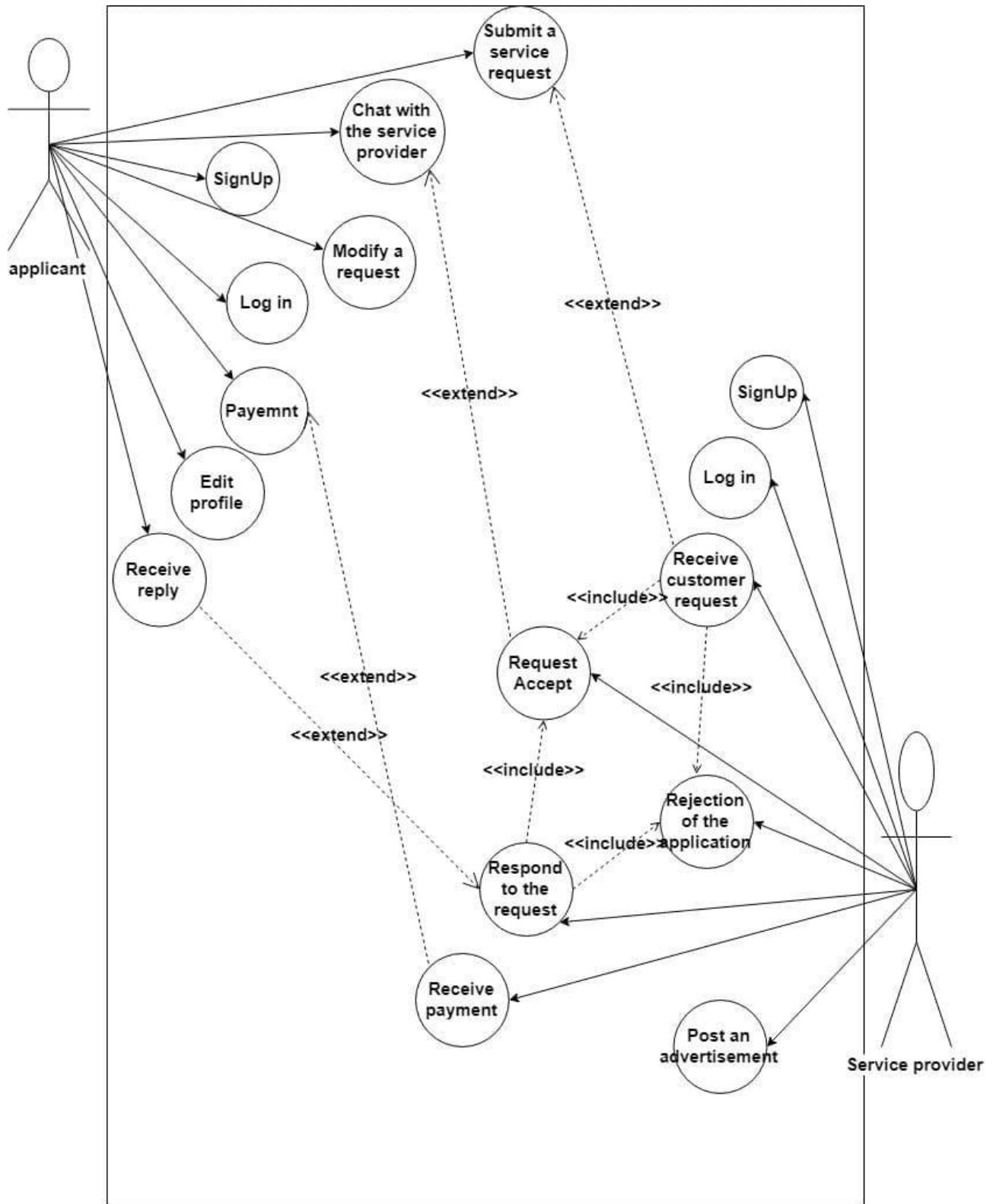
## **2.1 Product Functions**

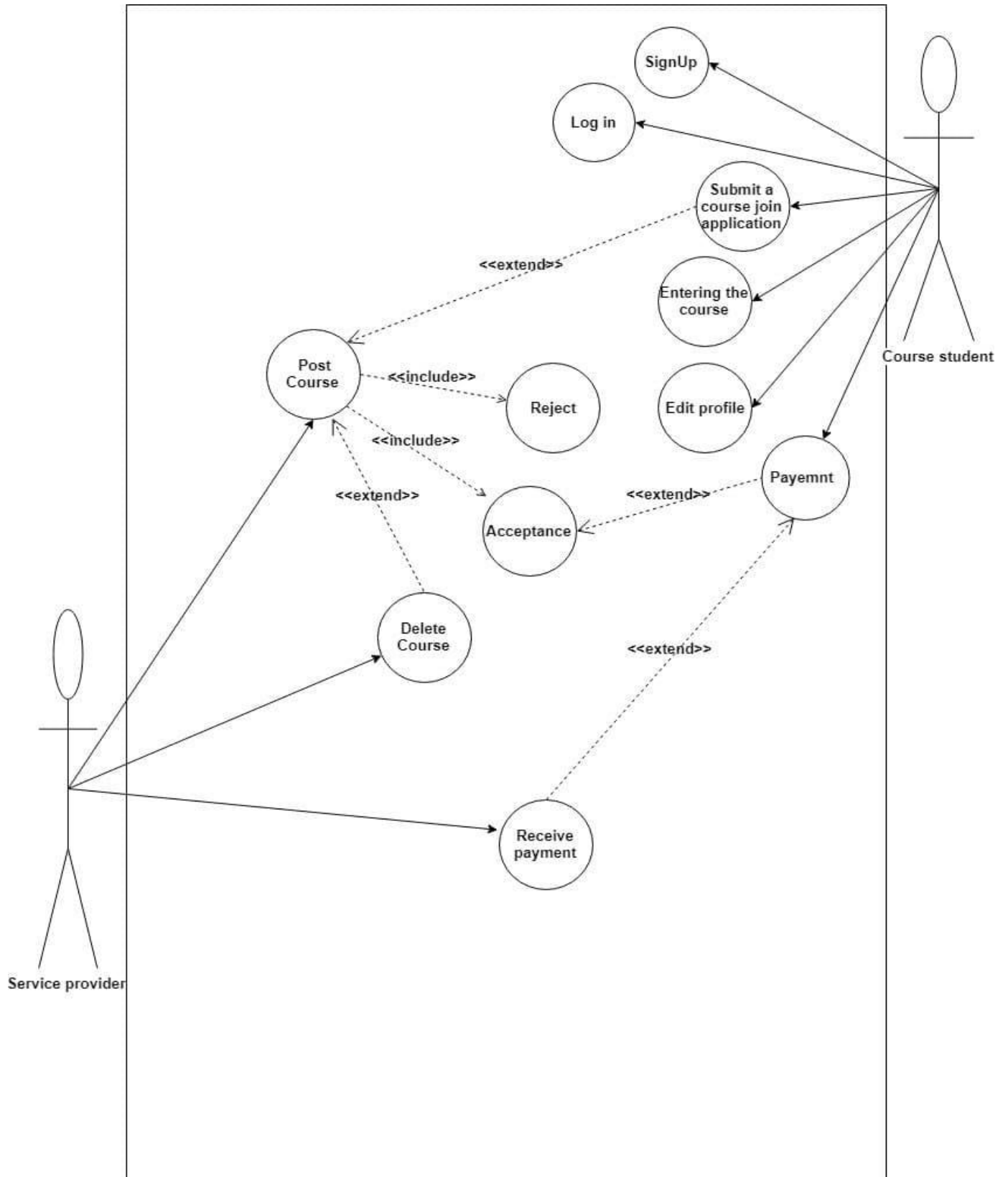
The platform has many functions that seek to facilitate the customer's experience, including linking companies and individuals with one platform to make it easier for the customer to choose the proper engineer or company to implement his project, and after that comes the task of communicating with the engineer to explain the idea and upload files related to the project and an online payment option is available inside the platform. But one of the most important functions of the platform is to allow the job seeker to see the available job opportunities and training courses for those interested in the field of robotics and artificial intelligence. Among the future plans is to set up special rooms within the platform to hold training workshops.

## **2.2 User Classes and Characteristics**

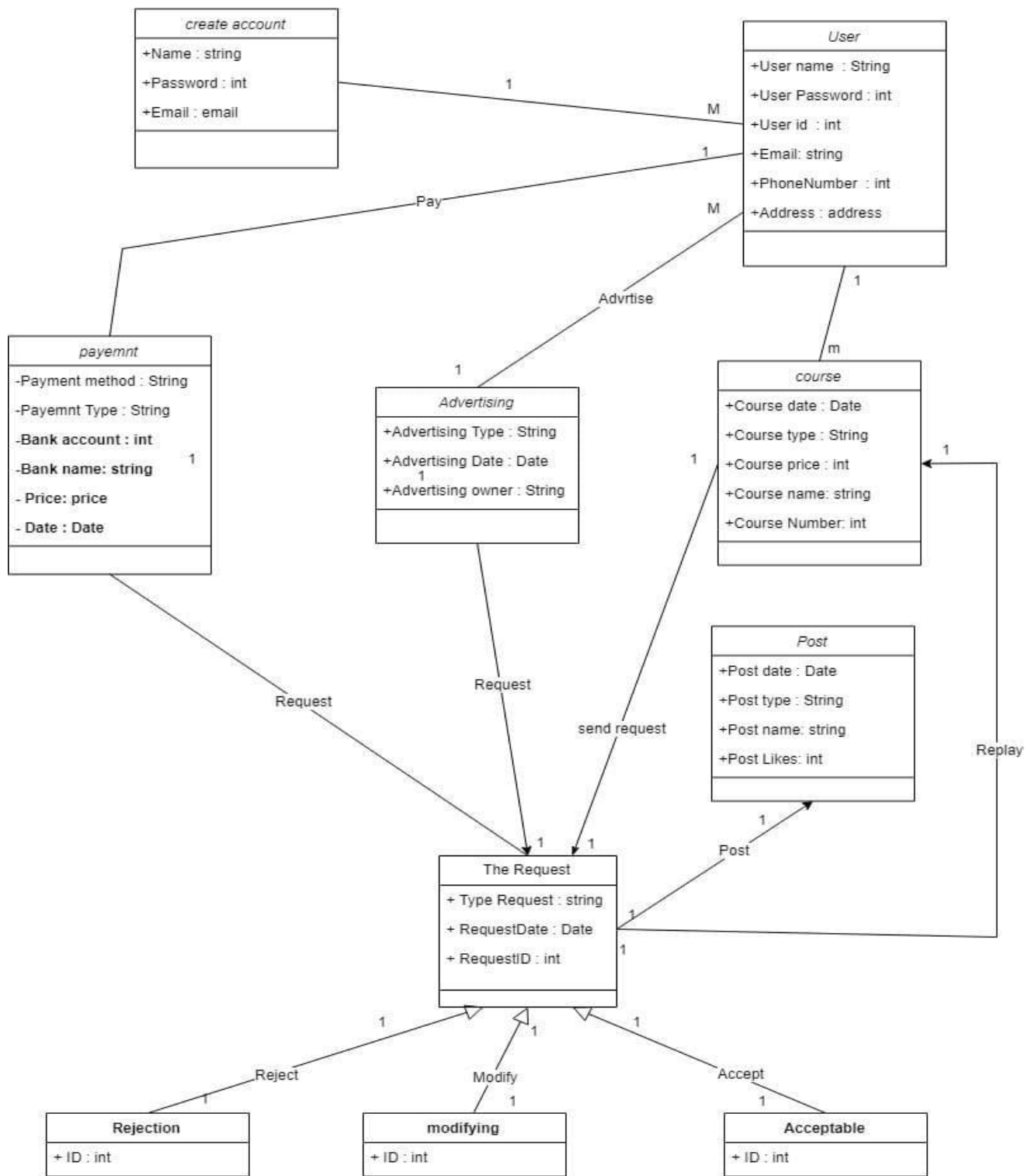




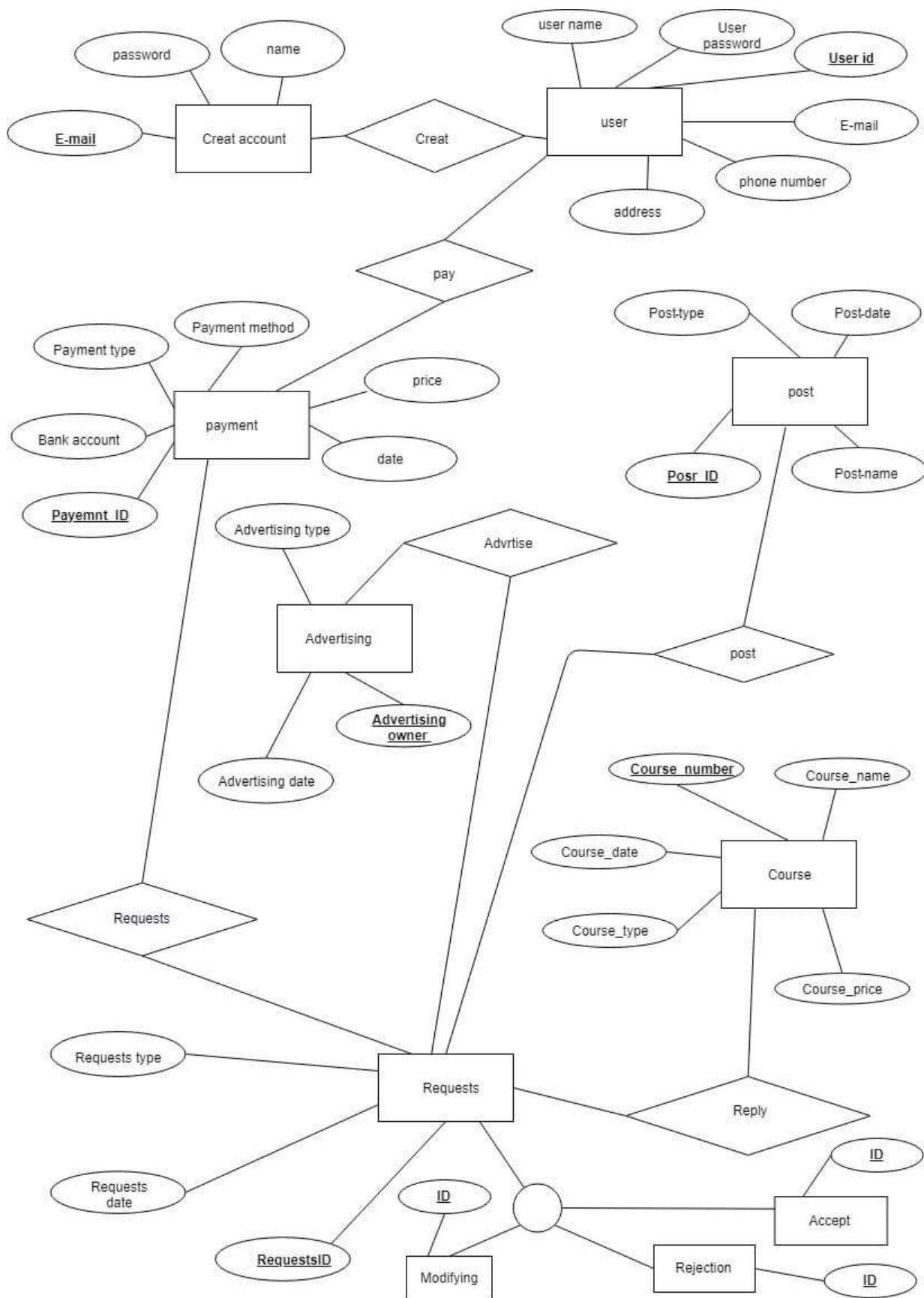




- Class Diagram







## 2.3 Operating Environment

IOS, Android, and Website.

## 2.4 Design and Implementation Constraints

The platform takes 3 months to complete analysis, implementation, and testing, and more data is obtained from (MongoDB ) and for the limitations of the design that used is the limitations of the design techniques is (Cross platform),(Cordova) and include (HTML,CSS,JS, Bootstarb, jQuery). Also, the platform contains several pages such as Main page, Companies Main Page, Company Information Edit, Chat Page between company and client, Individuals Main Page, Individuals Chat Page between engineer and client, Service request - for the person looking for a service, Admin Page to display the advertisement schedule, Admin Page to view incoming amounts, Online Payment Page.

## 2.5 User Documentation

The platform contains several things that help the customer use the site easily, such as the presence of technical support, a video explaining how to use the site, the presence of common questions, a form of complaints or suggestions, and the automatic chat.

# 3. External Interface Requirements

## 3.1 User Interfaces

The Wix site was used to create the first prototype for the project, and this design is not the final form of the application.



### **3.2 Software Interfaces**

The programming languages and libraries that were used in the project are (HTML,CSS,JS, Cordova,Bootstarb, jQuery).

### **3.3 Communications Interfaces**

For databases, we have used database (MongoDB ), and we will also use Firebase website.

## **4. Functional Requirements**

The user is able to:

1. Register
2. sign in
3. Publish a post
4. Edit profile
5. Delete a post
6. Edit a post
7. Communicate via the application
8. Company evaluation
9. Post evaluation
10. Request a training course

## **Other Nonfunctional Requirements**

### **4.1 Performance Requirements**

- The performance of the system should be fast and accurate.
- Library Management System shall handle expected and non-expected errors in ways that prevent loss in information and long downtime period. Thus it should have inbuilt error testing to identify invalid username/password.
- The system should be able to handle large amount of data. Thus it should accommodate high number of Requests and users without any fault.

## **4.2 Security Requirements**

- System will use secured database from the Firebase
- Users can just read information but they cannot edit or modify anything except their personal and some other information.
- System will have different types of users and every user has access constraints
- Proper user authentication should be provided
- No one should be able to hack users' password
- There should be separate accounts for admin and members such that no member can access the database and only admin has the rights to update the database

## **4.3 Reliability Requirements**

- Database should be synchronized to the cloud every 5 minutes.
- System shall be accessible 98% of the time.

## **4.4 Maintainability Requirements**

- No method in any object may exceed 100 lines of code.
- System failure recovery shall be within 40 mins.

## **4.5 Portability requirements**

- System shall be accessible on Google Chrome, Firefox, Safari, Opera ,Internet explorer,IOS ,and,Android.
- System shall be accessible on mobile devices.