



**Faculty of Technology**

**Department of Computer Engineering**

**Dharmsinh Desai University**

**B.Tech CE Semester-VI**

**Subject: (CE-620) Object Oriented Soft. Engg.**

**A**

**PROJECT REPORT ON**

# **E-Tender**

## **a Bidding Web Application**

**By**

**HARSHIT CHUDASAMA (CE027) (18CEUBG007)**

**Guided by:**

**Prof. Mrudang T. Mehta  
Associate Professor Dept. of  
Comp. Engg.DDU**



**Faculty of Technology**  
**Department of Computer Engineering**  
**Dharmsinh Desai University**

## **CERTIFICATE**

This is to certify that the practical / term work  
carried out in the subject of

**Object Oriented Soft. Engg.** and recorded in this  
journal is the bonafide work of

**HARSHIT CHUDASAMA (CE027) (18CEUBG007)**

of B.Tech semester **VI** in the branch of **Computer Engineering**  
during the academic year **2020-2021**.

**Prof. Mrudang T. Mehta**

Assistant Professor of Department of  
Computer Engineering, Dharmsinh  
Desai University, Nadiad

**Dr. C. K. Bhensdadia**

Head of Department of Computer  
Engineering, Dharmsinh Desai  
University, Nadiad

## Table of Contents

1 Abstract.....	4
2. Introduction.....	5
Project Details: Brief Introduction .....	5
Technology and Tools Used .....	5
3 Software Requirement Specifications .....	6
4. Design.....	11
Use Case .....	11
Class Diagram.....	12
Sequence Diagram.....	12
Activity Diagram.....	13
E-R Diagram .....	14
State Diagram.....	14
Collaboration Diagram .....	15
Component Diagram .....	15
Deployment Diagram .....	16
Package Diagram .....	16
Data Dictionary... ..	17
5 Implementation Details .....	18
6 Testing .....	19
Test Cases .....	19
7 Screen-shots of the System.....	20
8 Conclusion .....	26
9 Limitations and Future Extensions of System .....	27
10 Bibliography .....	28

# 1. Abstract

---

The **E-Tender a online Bidding Application** is a web application to bid on published tenders. The main objective is to bid on tender and get chance to take project without doing any manual work and without going to office it's save lots of time of user.

## 2. Introduction

---

### **Brief Introduction**

The Online Bidding is an application that give chance companies to bid on published tenders and take a project. In this application company can login through email and password. They can see all available tenders and select the tender to bid. User can publish new tenders and close the tender also they can see bids on their tenders. The purpose of this application is to transform the manual process of bidding to a computerized system.

### **Tools/Technologies Used**

#### **Technologies:**

- .Net Core
- Entity Framework

#### **Tools:**

- Visual Studio 2019
- Umlet

# 3. Software Requirement Specifications

---

## 1 User Functionality

### R.1 Login

⇒ All the user have to login to run all functionalities.

⇒ **Input:**

- E-mail address
- Password

⇒ **Output:**

Home page if credentials are correct.

### R.2 Registration

⇒ For new user he/she have to create account

⇒ **Input:**

- All details of user

⇒ **Output:**

- Successful message for registration

### **R.3 Post Tender**

⇒ User can generate new tender for their projects.

⇒ **Input:**

- All details of tender

⇒ **Output:**

- Successful message

### **R.4 View response to tender**

⇒ User can see all bids done in their particular tender

⇒ **Input:**

- Selection of the tender

⇒ **Output:**

- List of all responses.

### **R.5 Close Tender**

⇒ User can close tender for further bidding.

⇒ **Input:**

- Selection of tender

⇒ **Output**

- Successful message

## **R.6 Logout**

⇒ User can logout from the system

⇒ **Input:**

- Selection to logout

⇒ **Output:**

- Login Screen

## **2. Company Functionality**

### **R.1 Login**

⇒ All the user have to login to run all functionalities.

⇒ **Input:**

- E-mail address
- Password

⇒ **Output:**

Home page if credentials are correct.

### **R.2 Logout**

⇒ User can logout from the system

⇒ **Input:**

- Selection to logout

⇒ **Output:**

- Login Screen

### **R.3 Registration**

⇒ For new user he/she have to create account

⇒ **Input:**

- All details of user

⇒ **Output:**

- Successful message for registration



#### **R.4 View Tender to bid**

⇒ Company can see all available tenders

⇒ **Input:**

- Selection for see all tender

⇒ **Output:**

- List of available tender

#### **R.5 Response to tender**

⇒ Company can bid in tenders

⇒ **Input:**

- Information required for bidding

⇒ **Output:**

- Successful message

#### **R.6 View Assigned Tender**

⇒ Company can see all their assigned tender

⇒ **Input:**

- Selection to see all assigned tender

⇒ **Output:**

- List of assigned tender

### 3. Admin Functionality

#### R.1 Login

⇒ All the admin have to login to run all functionalities.

⇒ **Input:**

- E-mail address
- Password

⇒ **Output:**

Home page if credentials are correct.

#### R.2 Logout

⇒ Admin can logout from the system

⇒ **Input:**

- Selection to logout

⇒ **Output:**

- Login Screen

#### R.3 Verification of company

⇒ Admin have to verify all companies

⇒ **Input:**

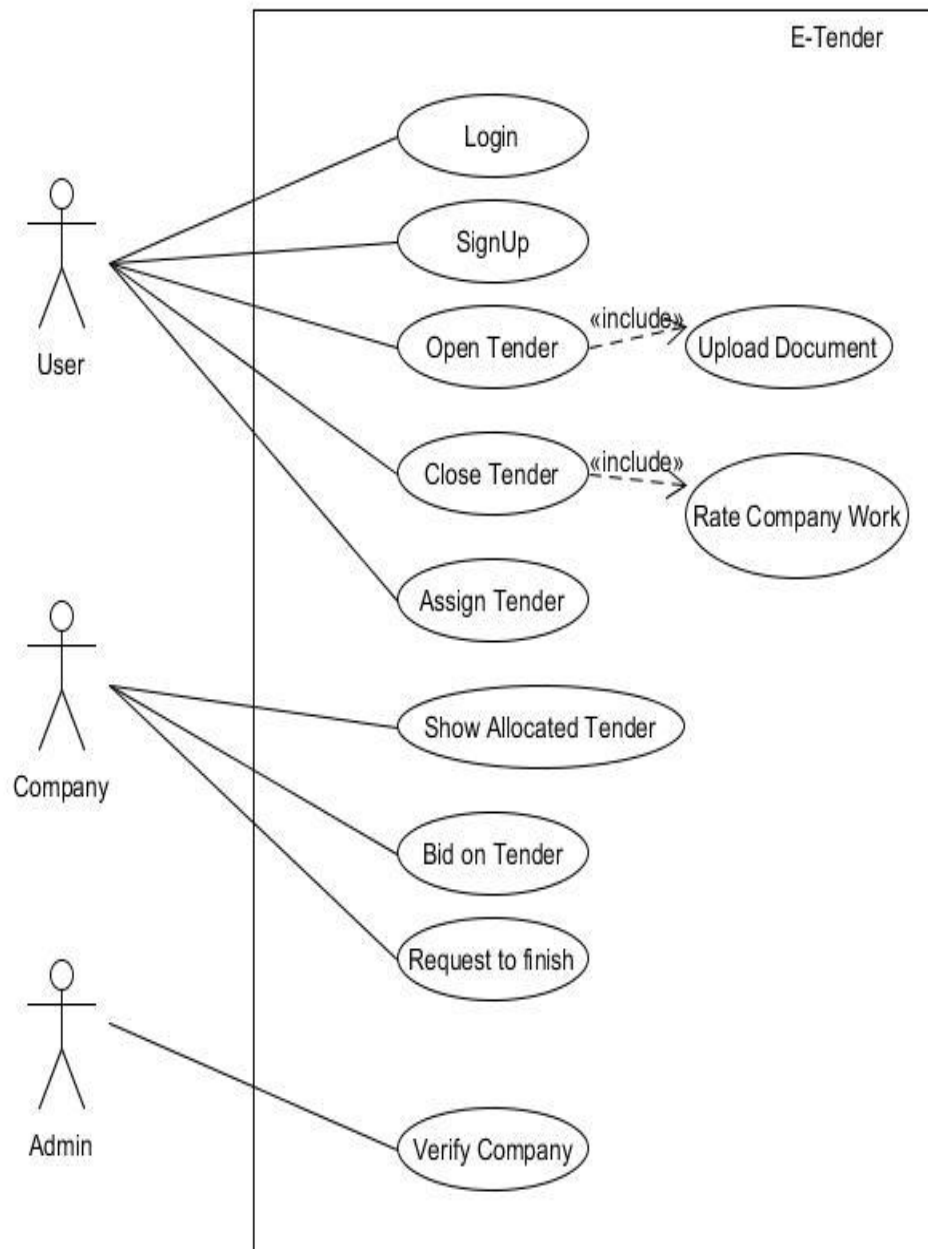
- Selection to verify

⇒ **Output:**

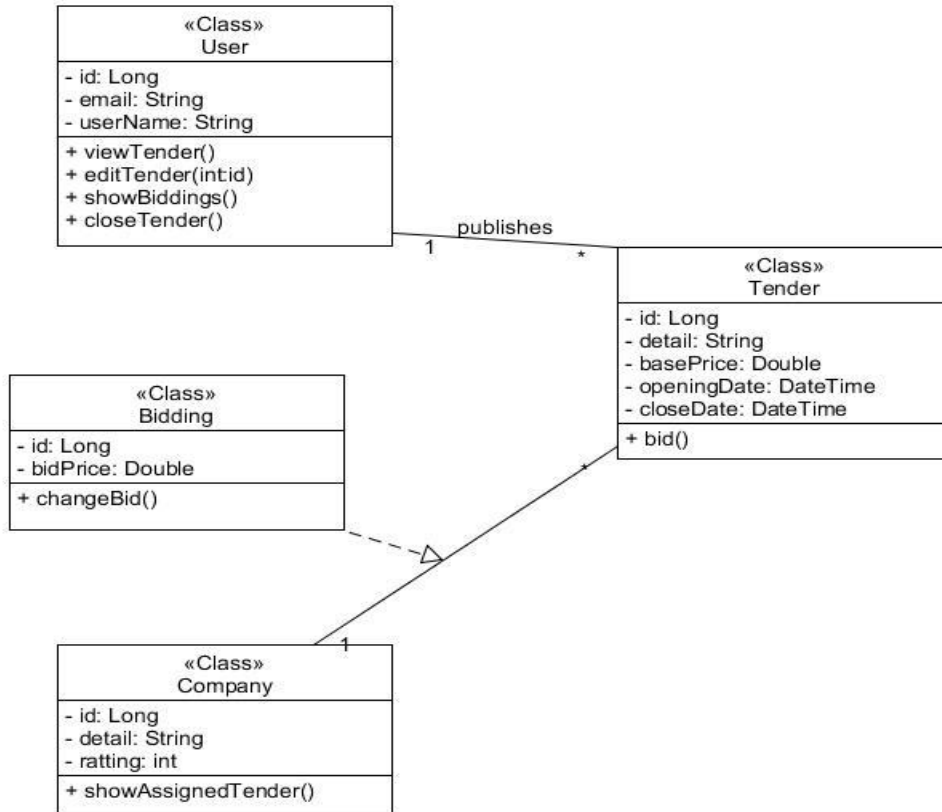
- Successful message.

# 4. Design

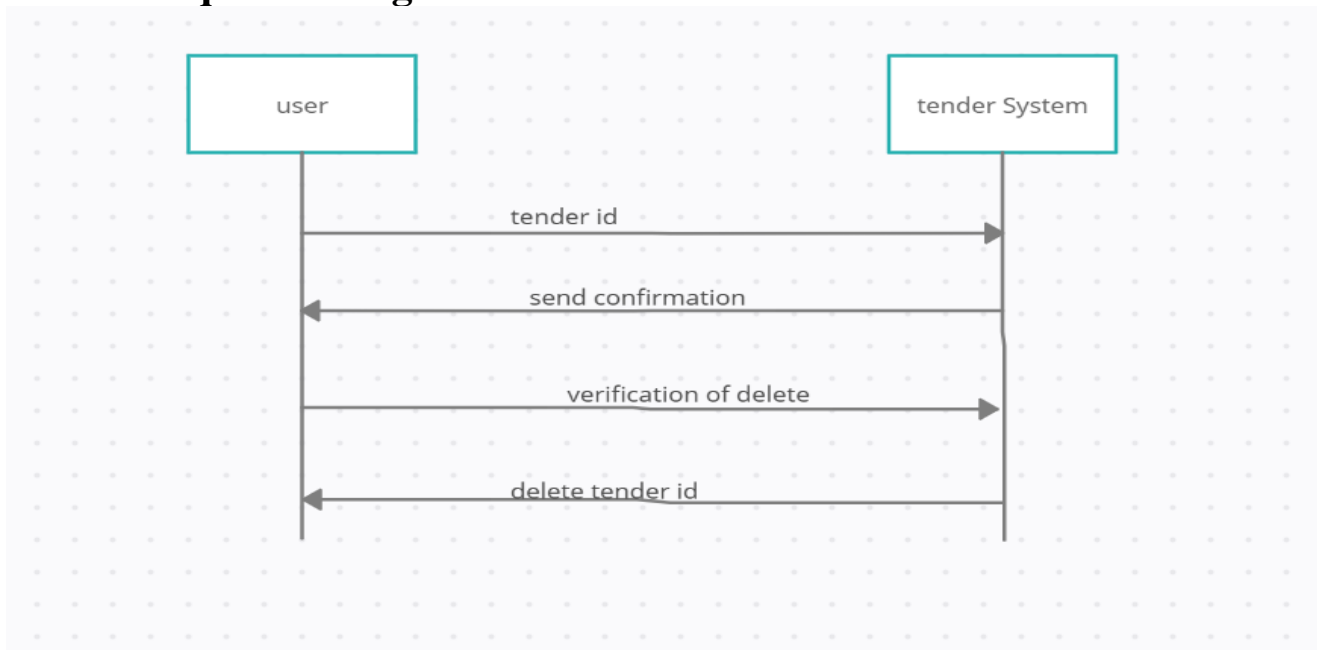
## 1. Use Case Diagram



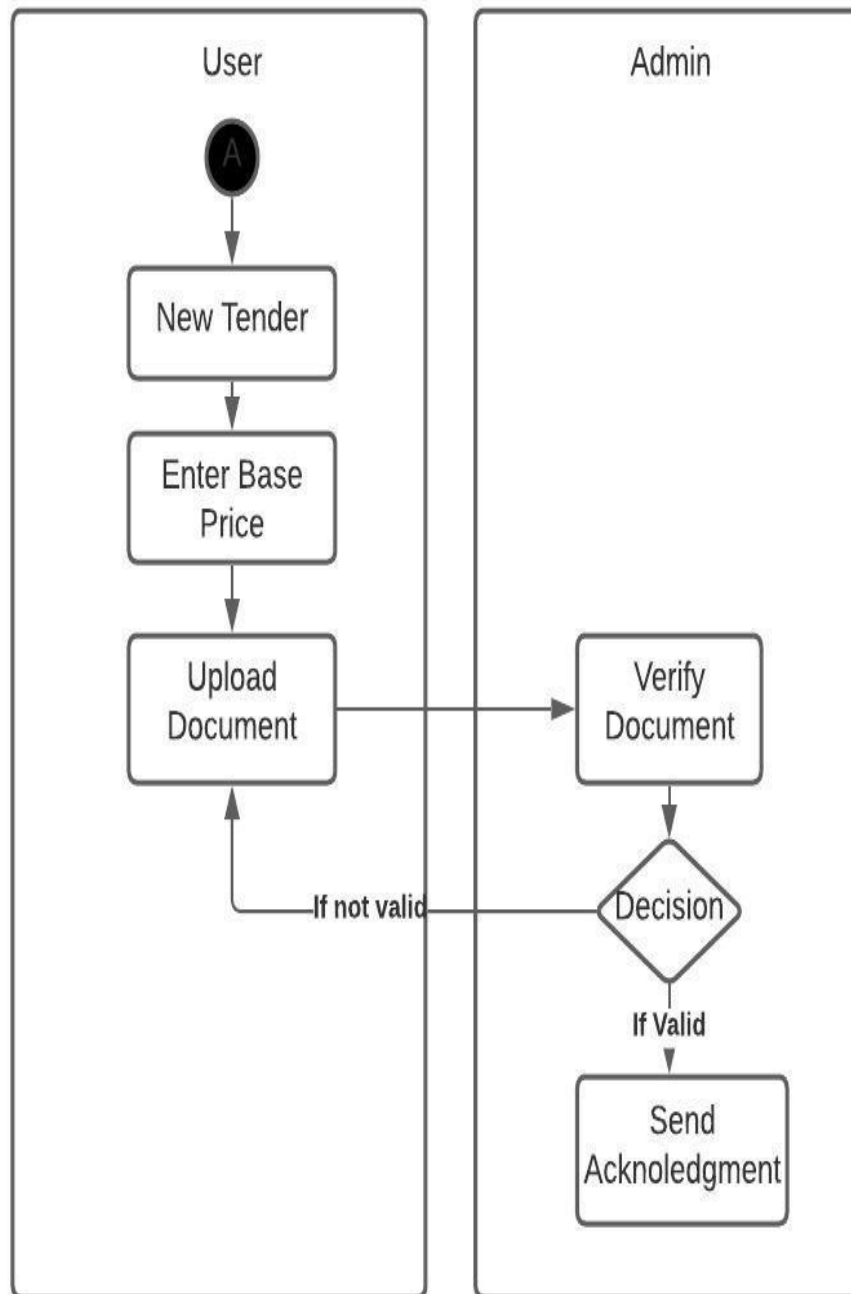
## 2. Class Diagram



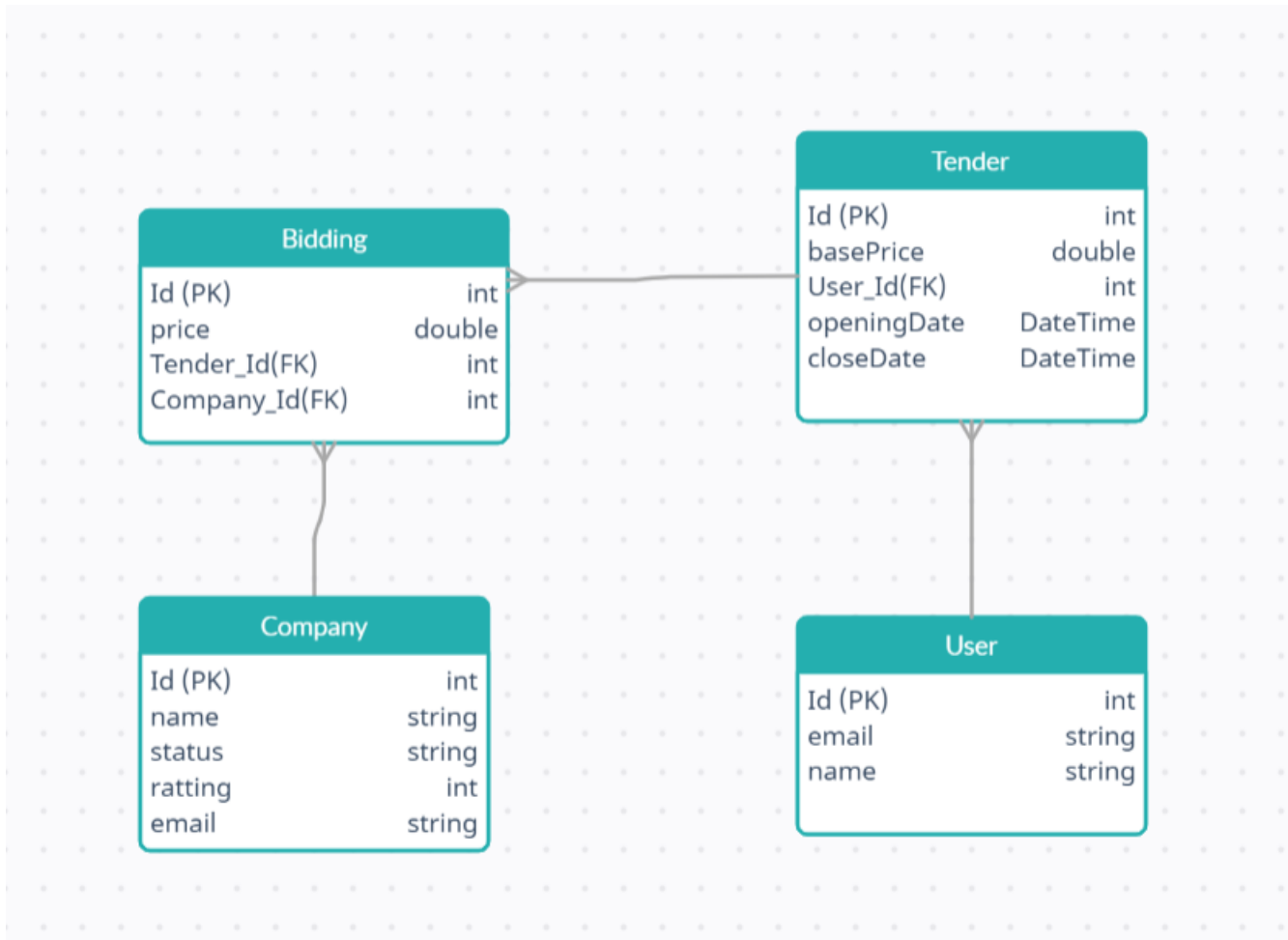
## 3. Sequence Diagram



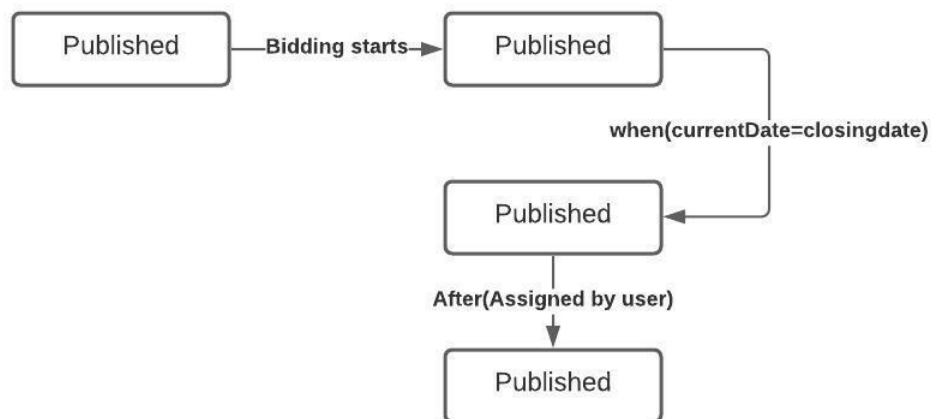
## 4. Activity Diagram



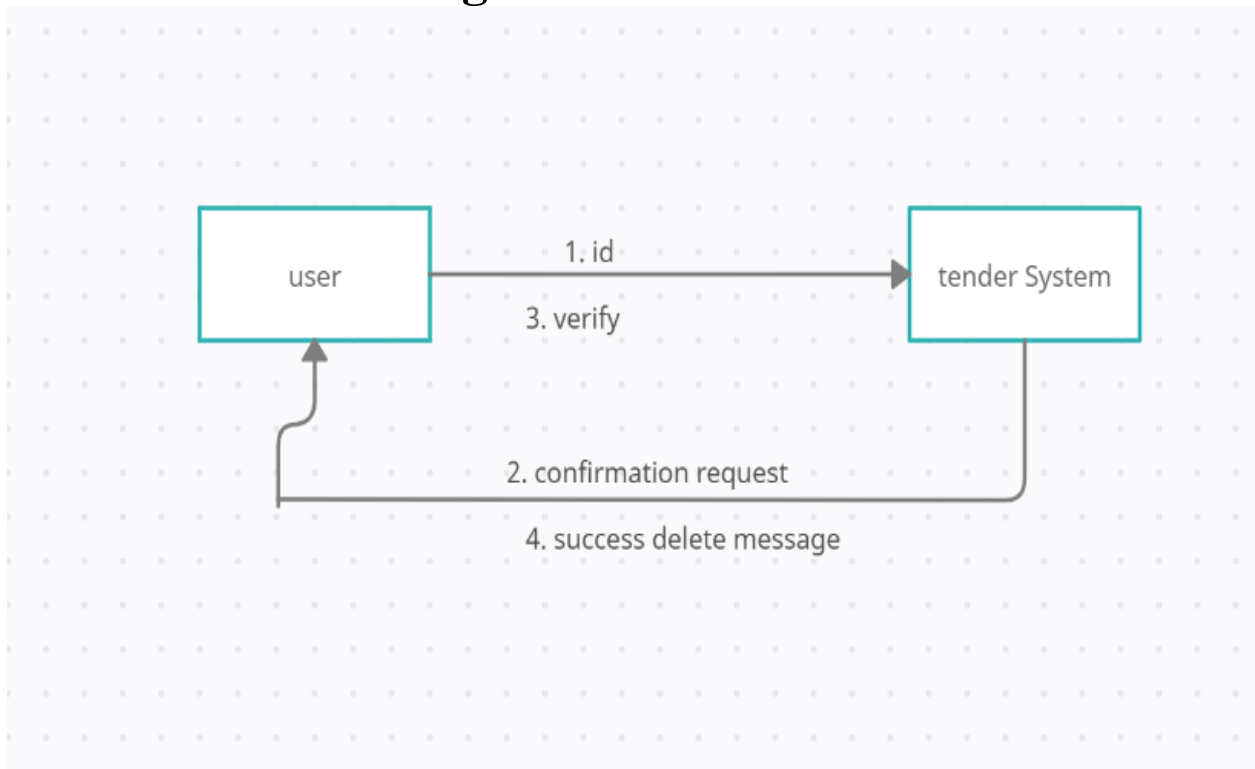
## 5. E-R Diagram



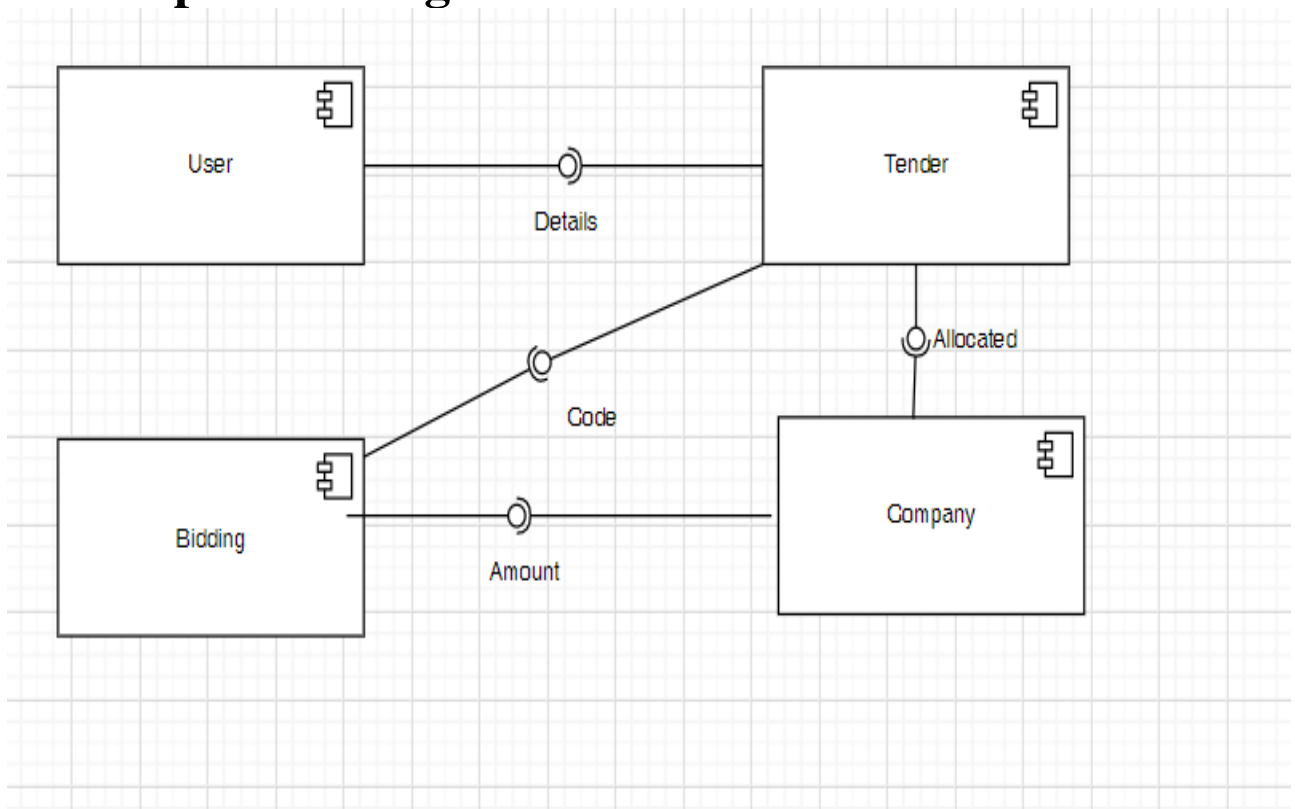
## 6. State Diagram



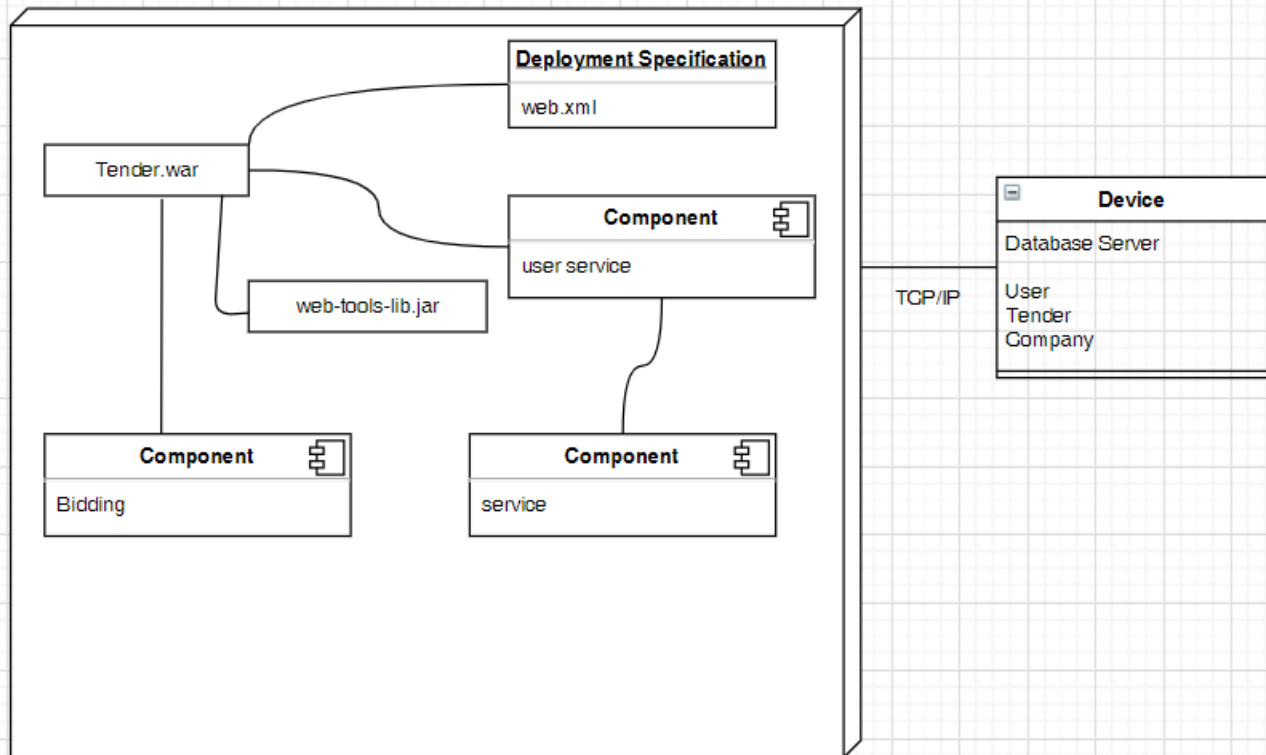
## 7. Collaboration Diagram



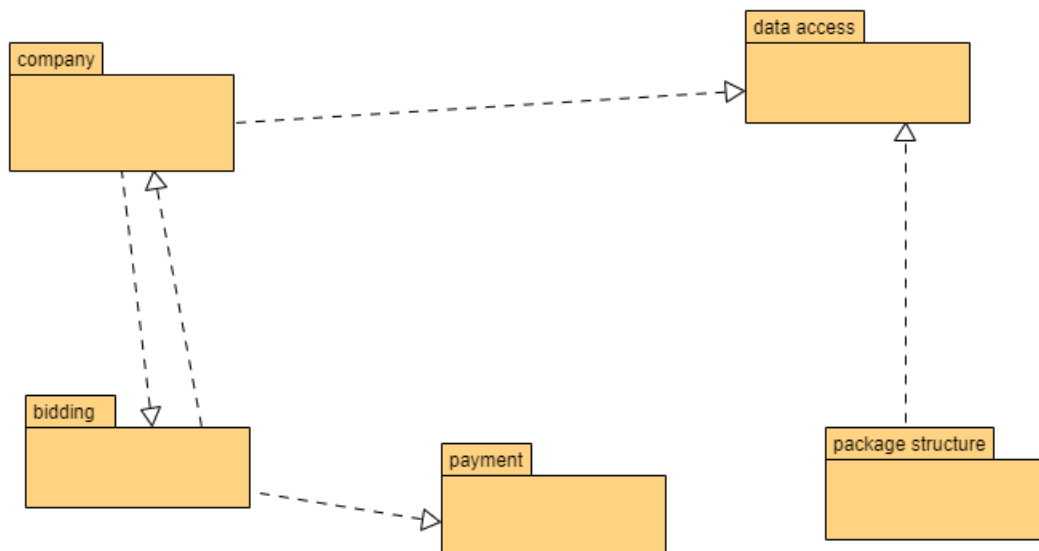
## 8. Component Diagram



## 9. Deployment Diagram



## 10. Package Diagram





## 11. Data Dictionary

User							
Sr No.	Field Name	Data Type	Width	Required	Unique	PK/FK	Reference
1	User_Id	INT	20	Yes	Yes	PK	
2	username	Varchar	20	Yes	No		
3	email	Varchar	20	Yes	Yes		

Company							
Sr No.	Field Name	Data Type	Width	Required	Unique	PK/FK	Reference
1	Company_Id	INT	20	Yes	Yes	PK	
2	details	Varchar	100	Yes	No		
3	ratting	int	20	Yes	No		

Tender							
Sr No.	Field Name	Data Type	Width	Required	Unique	PK/FK	Reference
1	Tender_Id	INT	20	Yes	Yes	PK	
2	details	Varchar	20	Yes	No		
3	basePrice	Double	10	Yes	No		
4	openingDate	DateTime	-	Yes	No		
5	closeDate	DateTime	-	Yes	No		
6	User_Id	INT	20	Yes	Yes	FK	

Bidding							
Sr No.	Field Name	Data Type	Width	Required	Unique	PK/FK	Reference
1	Bid_Id	INT	20	Yes	Yes	PK	
2	bidPrice	Double	10	Yes	No		
3	Tender_Id	INT	20	Yes	No	FK	
4	Company_Id	INT	20	Yes	No	FK	

**Login and Sign Up Module:**

User must enter his/her username, email id and a password to sign up. To login on the web application user must enter a valid email id and password. We have used Identity User in .net core framework to validate user.

**Tender Module:**

For user to add new tender he/she has to add all details in html form then post so mvc controller can detect the model and using Entity Framework system add new data in table which is stored in sql server.

**Bidding Module:**

When company clicks on bid form is visible in which company has to add details for bid. Then Entity Framework can add bid to bidding table.

**Admin Module:**

Admin can see all new companies and need to verify them.

13.

## Testing

I have done manual testing and some test cases are listed below.

### Test Cases:

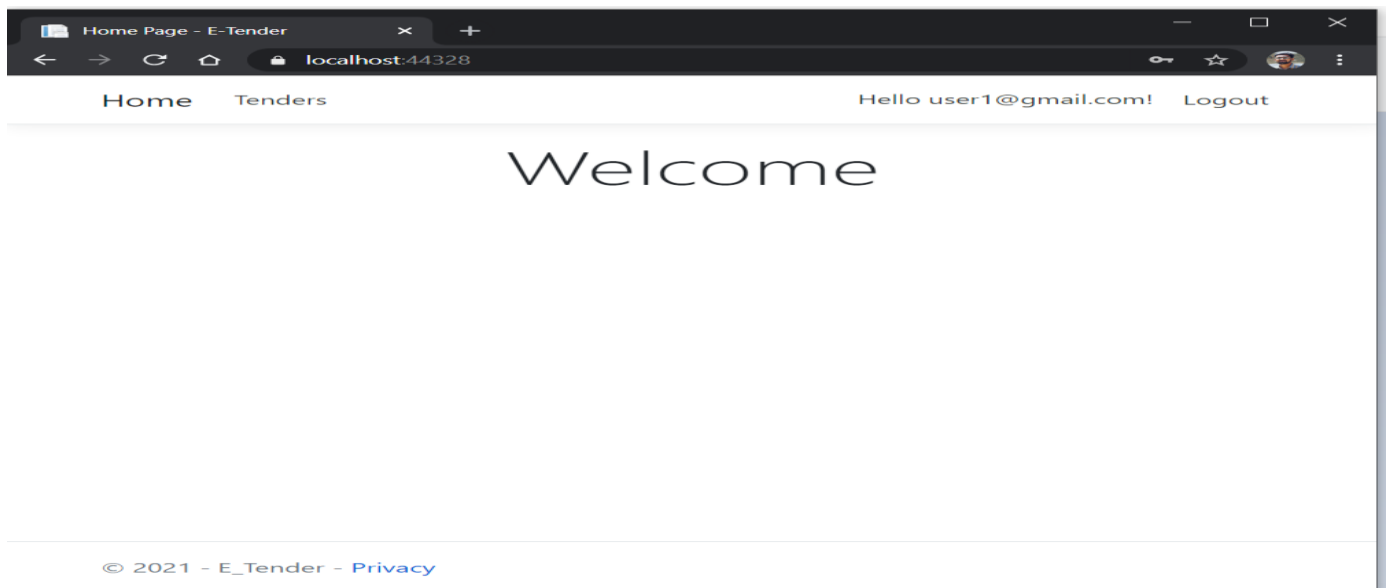
Module name	Field Input	Expected output	Actual output
Login	Username & Password (true input)	Redirect to Home page	Redirect to Home page
Login	Username & Password (wrong password)	Error message and Stay to login page	Error message and Stay to login page
SignUp	Email(email which Is already taken)	Warning message and stay to signup page	Warning message and stay to signup page
Tender Details	Selection of valid tender	Tender details appear on screen	Tender details appear on screen
Bidding Details	Select valid bid	Bidding Details appear on screen	Bidding Details appear on screen
Bidding Details	Add new Bid in valid tender	Successful message	Successful message

14.

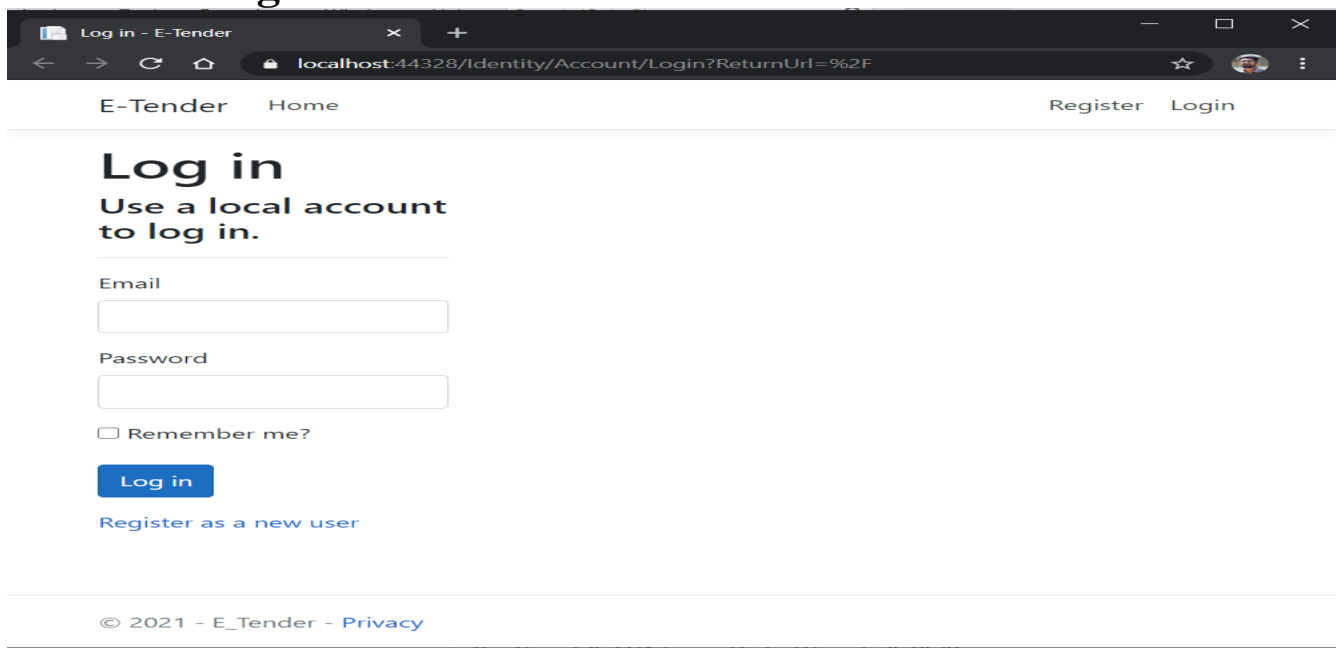
## Screen Shots of the system

---

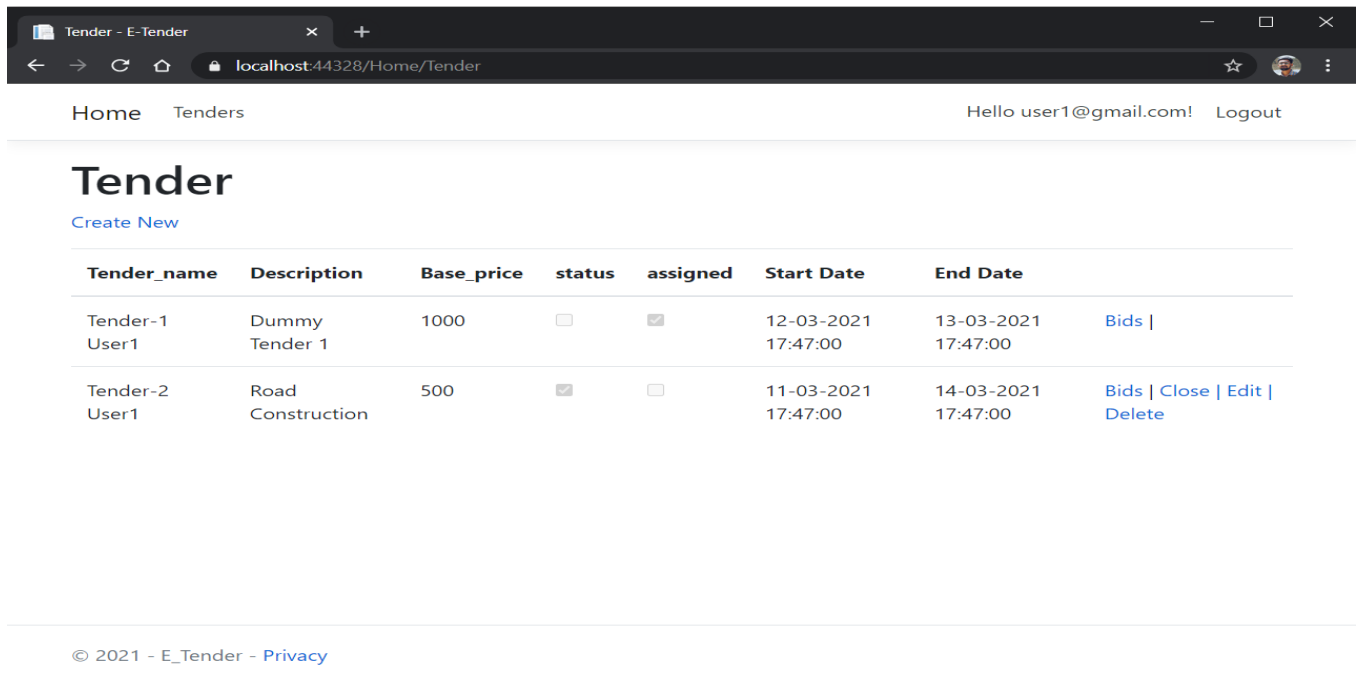
### 1. User Home Page



### 2. Login



### 3. Tender List in User

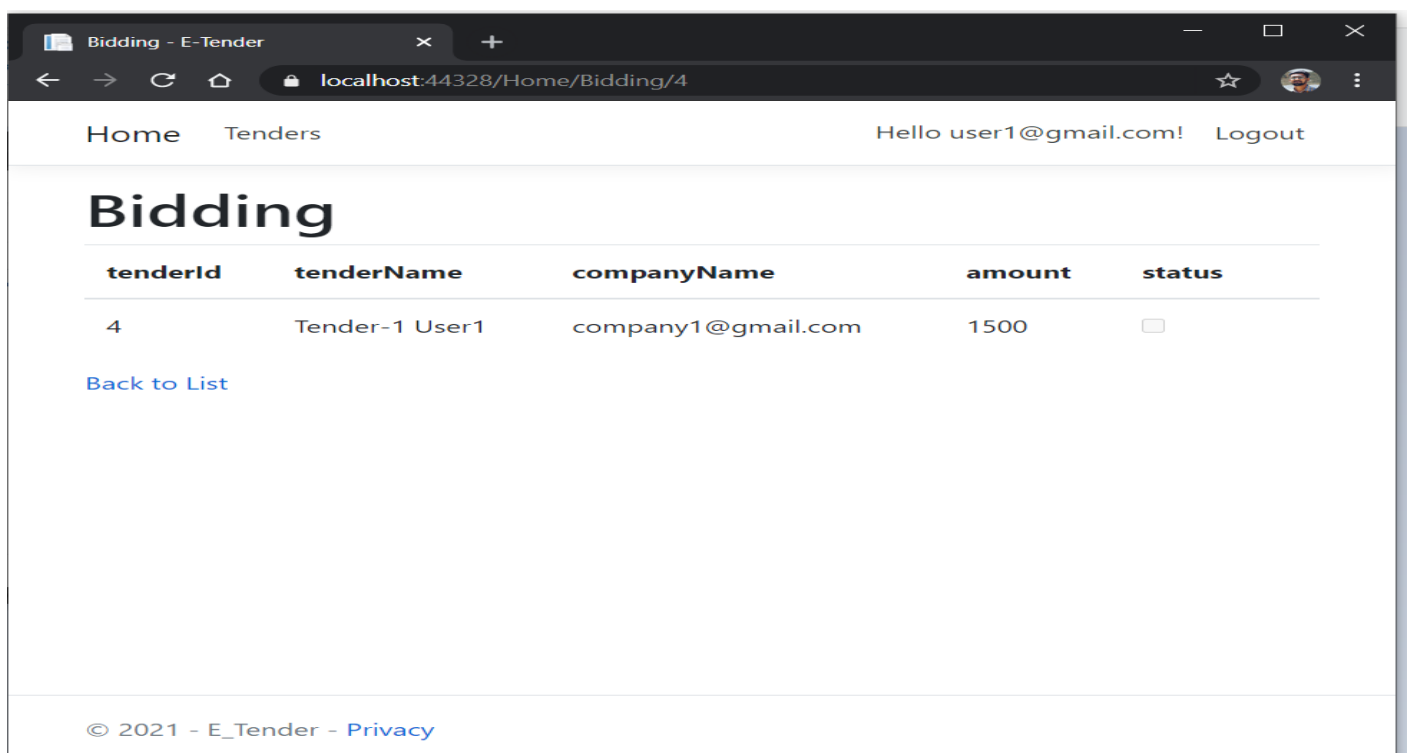


The screenshot shows a web browser window with the title "Tender - E-Tender". The address bar displays "localhost:44328/Home/Tender". The navigation bar includes "Home" and "Tenders" links, and a user greeting "Hello user1@gmail.com!" with a "Logout" link. The main heading is "Tender", followed by a "Create New" link. Below this is a table with the following data:

Tender_name	Description	Base_price	status	assigned	Start Date	End Date	
Tender-1 User1	Dummy Tender 1	1000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12-03-2021 17:47:00	13-03-2021 17:47:00	<a href="#">Bids  </a>
Tender-2 User1	Road Construction	500	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11-03-2021 17:47:00	14-03-2021 17:47:00	<a href="#">Bids  </a> <a href="#">Close  </a> <a href="#">Edit  </a> <a href="#">Delete</a>

At the bottom, there is a copyright notice: "© 2021 - E\_Tender - [Privacy](#)".

### 4. Bid List in tender

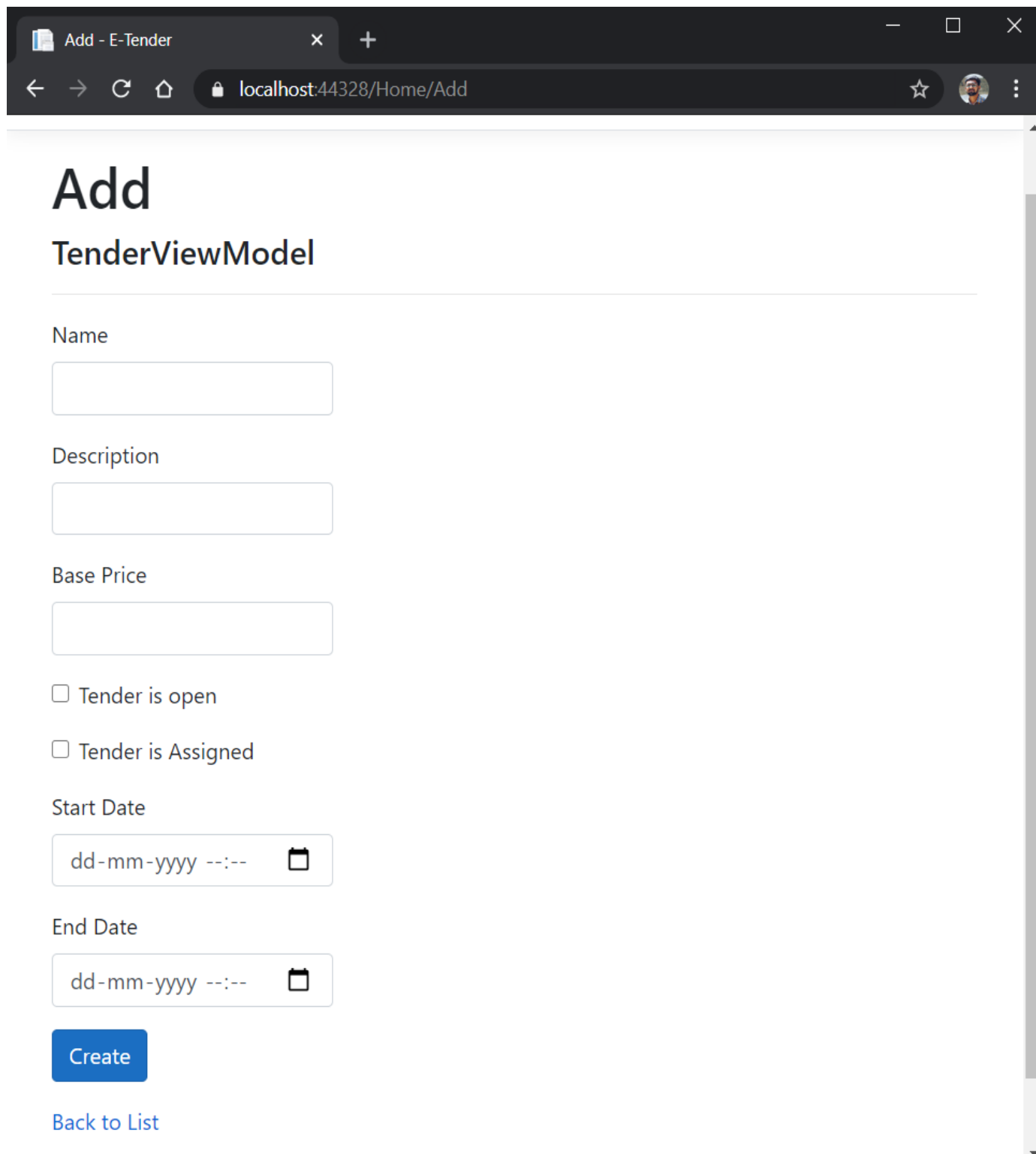


The screenshot shows a web browser window with the title "Bidding - E-Tender". The address bar displays "localhost:44328/Home/Bidding/4". The navigation bar includes "Home" and "Tenders" links, and a user greeting "Hello user1@gmail.com!" with a "Logout" link. The main heading is "Bidding". Below this is a table with the following data:

tenderId	tenderName	companyName	amount	status
4	Tender-1 User1	company1@gmail.com	1500	<input type="checkbox"/>

Below the table, there is a "Back to List" link. At the bottom, there is a copyright notice: "© 2021 - E\_Tender - [Privacy](#)".

## 5. Add Tender



Add - E-Tender

localhost:44328/Home/Add

# Add

## TenderViewModel

Name

Description

Base Price

☐ Tender is open

☐ Tender is Assigned

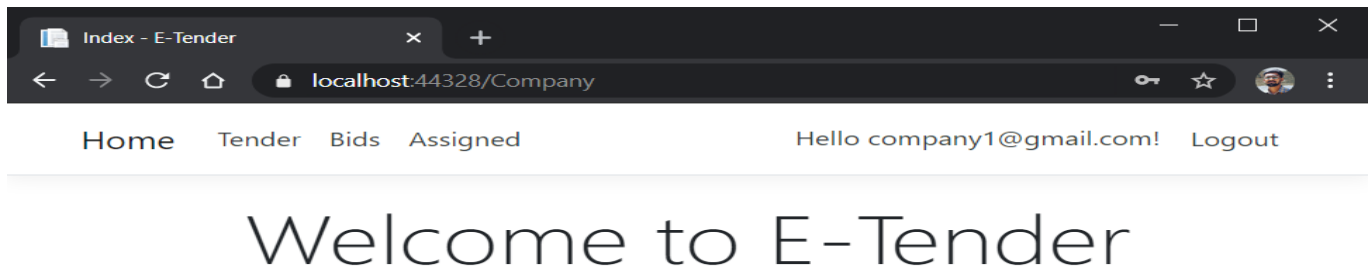
Start Date

End Date

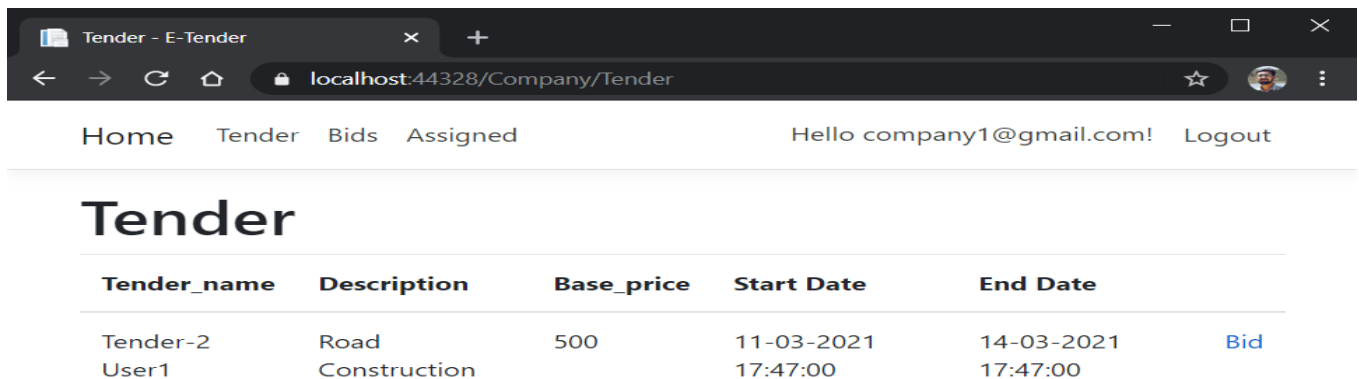
Create

[Back to List](#)

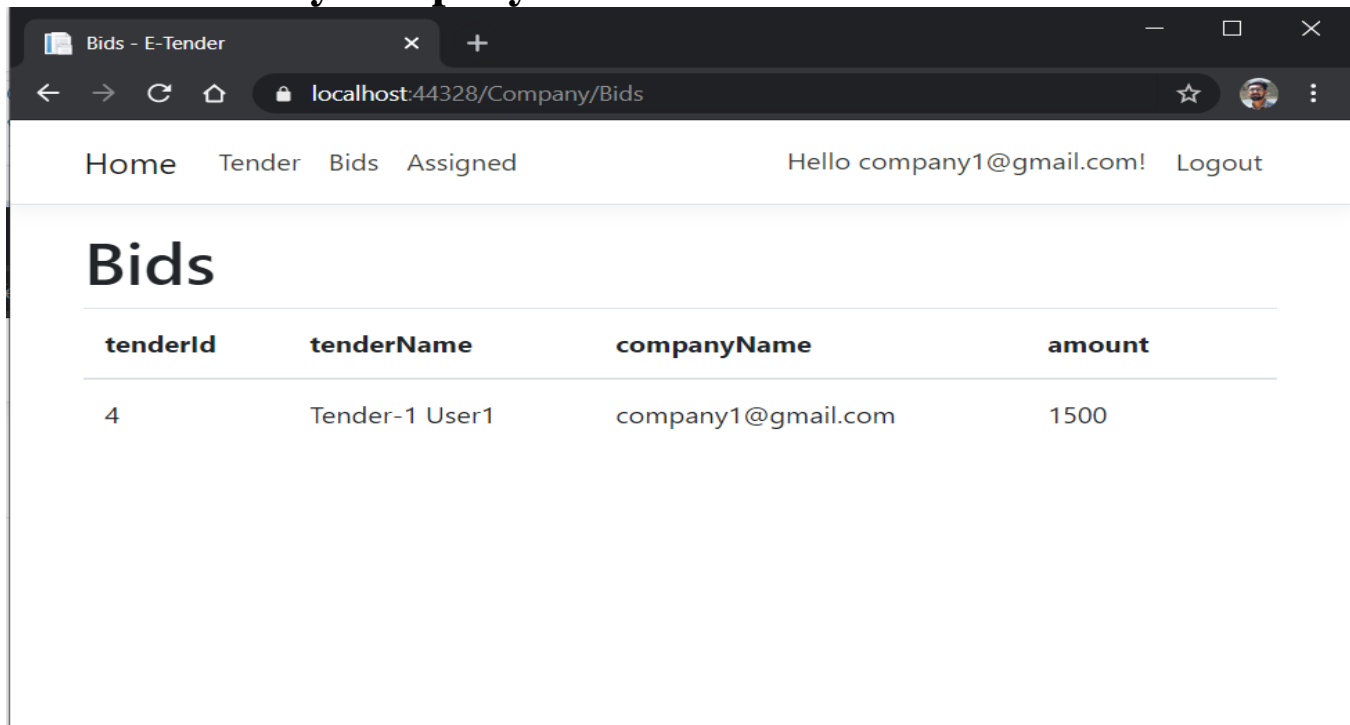
## 6. Company Home Screen



## 7. Tender list in company



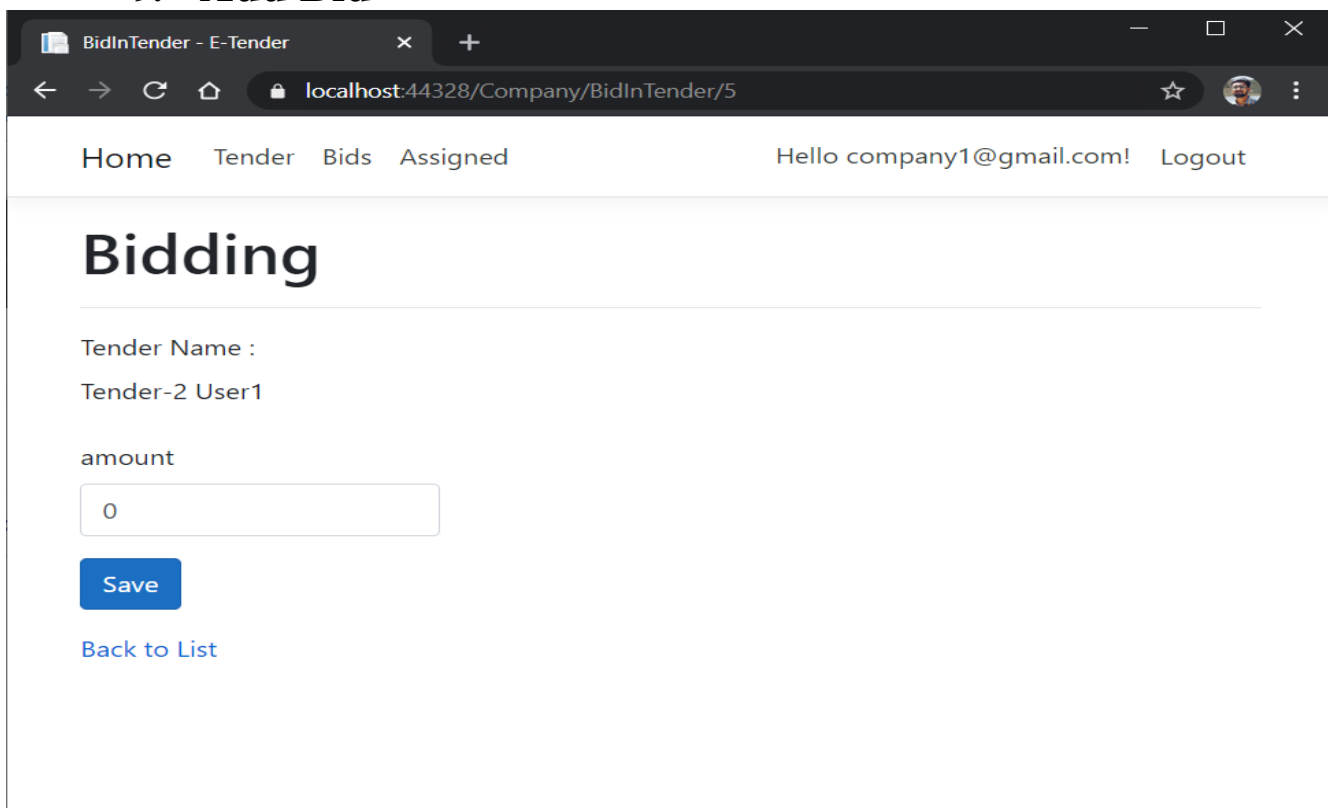
## 8. Bid by company



The screenshot shows a web browser window with the title 'Bids - E-Tender'. The address bar shows 'localhost:44328/Company/Bids'. The navigation bar includes 'Home', 'Tender', 'Bids', and 'Assigned', along with the user 'Hello company1@gmail.com!' and a 'Logout' link. The main heading is 'Bids'. Below it is a table with the following data:

tenderId	tenderName	companyName	amount
4	Tender-1 User1	company1@gmail.com	1500

## 9. Add Bid



The screenshot shows a web browser window with the title 'BidInTender - E-Tender'. The address bar shows 'localhost:44328/Company/BidInTender/5'. The navigation bar includes 'Home', 'Tender', 'Bids', and 'Assigned', along with the user 'Hello company1@gmail.com!' and a 'Logout' link. The main heading is 'Bidding'. Below it, the form displays 'Tender Name : Tender-2 User1' and 'amount' with a text input field containing '0'. There is a blue 'Save' button and a blue link 'Back to List'.



## 10. Invalid login

The screenshot shows a web browser window with the title "Log in - E-Tender". The address bar displays the URL "localhost:44328/Identity/Account/Login?ReturnUrl=%2F". The page header includes "E-Tender Home" on the left and "Register Login" on the right. The main heading is "Log in" with the instruction "Use a local account to log in." Below this, a red error message states "Invalid login attempt." The login form contains an "Email" field with the value "user1@gmail.com", a "Password" field, and a "Remember me?" checkbox. A blue "Log in" button is positioned below the form. A link "Register as a new user" is located at the bottom of the form. The footer of the page reads "© 2021 - E\_Tender - Privacy".

Log in - E-Tender

localhost:44328/Identity/Account/Login?ReturnUrl=%2F

E-Tender Home Register Login

# Log in

Use a local account to log in.

- Invalid login attempt.

Email

user1@gmail.com

Password

☐ Remember me?

Log in

[Register as a new user](#)

© 2021 - E\_Tender - [Privacy](#)

Login functionality was successfully implemented by the use of Identity in .Net Core. Home page animation, footer was successfully implemented using CSS, Bootstra. Retrieving of tenders is implemented using repositories. tender details page was successfully implemented by fetching the details from database and displayed on the browser using Razor pages. User can add, delete and update tender details and see all bids details. Company can see all tenders and can bid on available tenders. They can also see their previous bids and also see assigned tenders.

## 9. Limitation and Future Extension

---

### **Limitations:**

- Payment module is not implemented.
- Admin cannot see statistics of users.
- Document upload is not implemented

### **Future Extension:**

- User and Company can chat with each other.
- User can give rating to companies work.

# 10. Bibliography

---

- <https://docs.microsoft.com/en-us/dotnet/fundamentals/>
- <https://stackoverflow.com/>