

# Bike Rental Management System

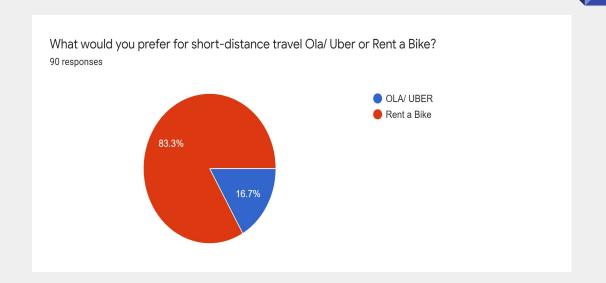
Submitted by -Jeenisha Shrungare (360) Radhika Mundada (338) Priyanka Ambekar (301) Priya Chougule (306)



### Problem definition

The objective of the proposed Bike Rental Management System, the users will be able to rent bikes or give away their bikes on rent. This will be a feasible option for people not preferring other ride sharing services (ex: Ola, Uber); providing more flexibility to them with their own rented bike. Our system will have bikes placed at a designated spot by the renter, from where users are required to pick up and drop their rented bikes. The rental pricing will vary from bike to bike, calculated on basis of various factors. The users can then search for available bikes and book their preferred bikes; and will be allowed to cancel their bookings too, if needed.

### Google Form Survey Result :



- Prefer a Rented Bike for destinations like Mall, College, Bank, One day Trip.
- Bike owners also prefer a rented bike in case of emergency.

## Scope of Project

#### **Short Term Goals**

Creating an interactive web interface to facilitate users to rent a bike, or give away their bike on rent at costs in consideration with various factors.

#### **Milestones**

- To provide suitable renting costs.
- Include promising Bike Owners.
- Increase Bike Stations

#### Limitations

- Limited number of bike stations.
- Restricted area of coverage.
- Limited time for rent.
- Number of bikes available will not be constant or quaranteed.

# Scope of Project

### **Top Level Requirements**

- More number of Bikes
- Verification of User
  Documents
- Regular System
  Maintenance

### **Future Scope**

- Bike Pool System
- Addition of Company Bikes
- Additional of Payment Method in the system itself

### Stakeholders:

In consideration with the stakeholders of the project, they may be listed as per the following:

- 1. Team members
- 2. Customers
- 3. End users

### Actors:

- Team members
- Users :
- 1. People giving away bikes for rent.
- 2. People renting bikes.

# Functional Requirements

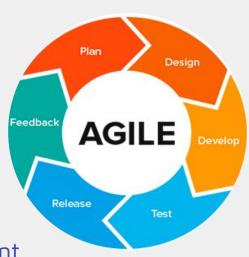
- Provide the bikes.
- Client registration.
- Booking and online reservation.
- Automatic update to database once reservation is made.
- Provide assurity.
- Saving time.

## Non Functional Requirements

- Provide username and password.
- Select bike in the list.
- Response time minimum 10 second.
- Depend on time owner can give the bike.

### Agile Process Model

- The tasks are divided into small time frames.
- Iterative approach.
- Flexibility and adaptability.
- Individuals and interactions-customer and actor.
- Customer collaboration-Essential for particular requirement.
- Responding to change-Quick response.

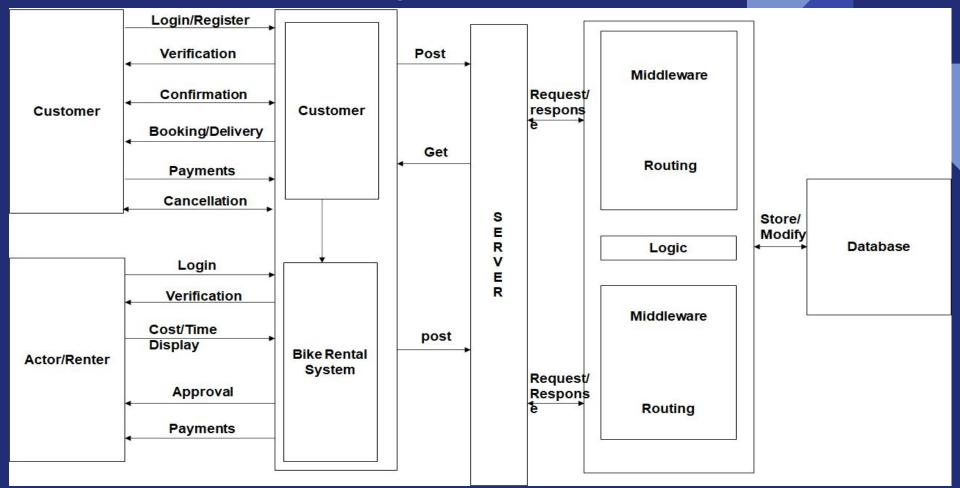


# WHY Agile?

- Adaptive software development methods
- Tested very frequently and constant feedback
- Proven to produce higher-quality software.
- More flexible since requirements are handled iteratively and detailed over a period time.
- The agile teams work in close collaboration with each other and are most often located in the same geographical location.

UML use case Diagram of Bike Rental System. Registration/ <<Include>> Login Verification Search Details Selection Actor/Renter Approval and Booking **Bike Delivery** <<include>> Customer **Payment Options** Display Bike Details /Return Time Store/Update Record Admin/System Bill/Receipt Generation

### Higher level View



Thank you!

Any Questions?