**1.3 General Objectives**

The aim of the project is to create a water transport system to enable SMEs as well as Organizations to track their cargo during transportation and track the number of people using the ferry per day.

**1.4 Specific Objectives**

1. To understand the water transport system in Kenya.
2. To establish challenges faced in water transport.
3. To design a system to solve the challenges faced in water transport.
4. To develop a system that will be used by passengers and SMEs or organizations to transport their cargo and to monitor it in transit.
5. To test the proposed system.

**Research questions**

1. What is the current system used to manage water transport?
2. What are the challenges faced in water transport?
3. How does the existing system function?
4. What is the best way to test the system?

**1.5 Justification**

The reason for the project is to increase the favorability of people using water transport and providing an opportunity to all types of SMEs and organizations to access ferry services. We want to make people feel that water transport can be easily accessible as inland transport and is also reliable especially with the factor of overpopulation being a major demerit of inland transport. The benefit of this system is that passengers will be able to book their trip depending on the availability of ferries, they will be able to be updated on the progress of their journey if there were those who would want to alight on the next stop, they will also be able to log in and cancel their trips incase of any mistakes they would have done. For SMEs and organizations, they will be able to log in, book a spot on the ferry for their cargo and be able to monitor it during transit.

The difference that we aim to bring to the current water transport system has made people lose confidence in using it, they would prefer using inland transport and incur the high costs in long distance transportation. For passengers this will many affect the less privileged members of society where they may need to go somewhere but due to the lack of proper capital the ought to forfeit and for SMEs and organizations their only option is cut off their vision of expanding to a global level and withholding their products to the area they are located. Our systems intend to provide a bridge to all to access ferry services that will be at fair prices and enable its users to express their satisfaction with their trip, which will be a light to win back the confidence of in water transport.

**1.6 scope**

The proposed study focuses on creating a web-based system that will allow a user to choose what services they want to access between passenger and cargo from the system. On the passenger side, they can book their trip on the ferry, choose a stop they would like to alight from the listed options, they will be able to see the location they had chosen to as their stop and they will also be able to delete their booked trip if by any chance they had a change of plans. The cargo side will have almost the same features as the passenger side, but its payment rates will be determined by the weight of the cargo and there will be prompt sent to the cargo owners based on the estimated time taken to get from one point to another. However, this system will not cover the payment processes and will only be deal with passengers without vehicles when booking.

**Limitations**

As we engage in this project, we anticipate facing some limitations such as weather conditions, server errors, time taken to load cargo onto the ferry. Interventions that we will employ to tackle these limitations will include setting up server security check time to ensure there will not be an error during booking times. Cargo loading will be set to start some time before the allocated departure time of the ferry to avoid delay. For the weather conditions there will be an alert to the users that a delay will be experienced.