Pre-study report

Problem analysis:

- If the team members don't do their job the project timeline will not be achievable and the deadline will have to be pushed back.
- If the technology related problems are persistent the deadline will have to be pushed back or the number of delivered features will go down.
- If the communication with the client is limited and the development team doesn't get the required information in time the development will be delayed and/or the wrong features will be delivered.
- If communication between the different teams fails this will result in the product not being completed/not meeting the requirements.

Project goals:

- Achieve understanding of contract based development.
- Being able to cooperate with different development teams.
- Create a reservation system with at least the reservation capability and a simple admin panel.

Stakeholders:

The only stakeholders that we have are the product owner (teacher) and the developers (us). The contribution of the developers is what brings the product to life. The product owner is the one answering all the answers for the developers, he is also the one representing the hypothetical customers.

Risk analysis:

- Unclear or no information from the client - The whole development process may be at risk if there is no communication between developers and clients. This issue usually appears when the client is not certain in their desires or they lack concentration in the communication process.

- Building a solution which overextends the basic requirements - If the developers are too stubborn they may create a program which provides a perfect solution but for a specific case. This may result in a product which is not fully developed in every area.

- The product may not satisfy the customers desires - if the client is uncertain in their requirements or the developers are not being able to build the correct solution or

anything in between then the final version of the program may be restricted and may not satisfy the needs of the everyday customer. The solution for this and everything upperly mentioned in communication.
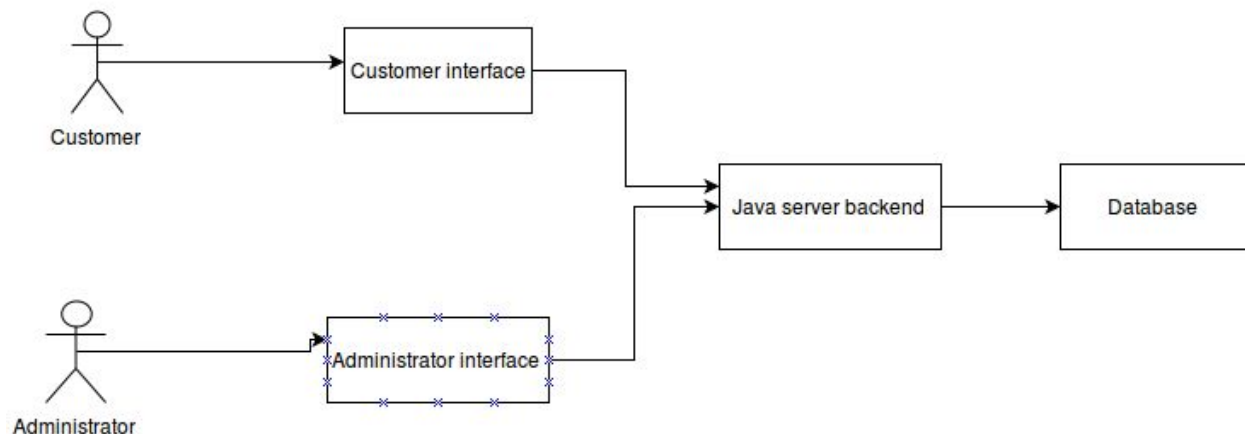
Overall description:

Functional requirements:
- The system has to provide customers with a way to make ferry reservations
- The system has to give administrators a way to make new ferry journeys

Non-functional requirements:
- The system should be responsive from a user perspective.
- The system should offer higher reliability than the older system.
- The system should provide options to expand its functionality on demand.

Description of the domain (Model):

Description of the required hardware incl. basic software (if any):
- Server machine capable of handling at least twice the amount of traffic needed for a medium sized Danish municipality or multiple machines load-balanced with a shared database server.
- Recent version of Java Virtual Machine - 1.7+.
- Database software - Oracle or similar SQL Database.

Project definition and recommendations:
Development path: We will work with UP
MTT: Java, OracleDB, SCRUM, Pair Programming.
QA: Unit test from the beginning of the development. Integration testing as soon as possible, Jenkins after we start deploying.
Further development: Unknown at this phase.
Incremental development approach: yes

Overall plan for the whole project life: Stable teamwork with frequent communication with the client. Following the UP goals, we should make sure that we will have specific requirement from the beginning. In this way we will try to reduce the changes during the development process to minimum.

Detailed plan for the next step: Unknown at this phase.

Cost/benefit: free because we are students and benefit is that we learn.