

# Projezt Delfin

Gruppens navn: **M.E.M.A**

Mark Bjørk Ziegler

GitHub: Markziegler1

Ebubekir Kayhan

GitHub: Data-boi-1

Malik Kütük

GitGub: MalikKtK

Albert Bek Jørgensen

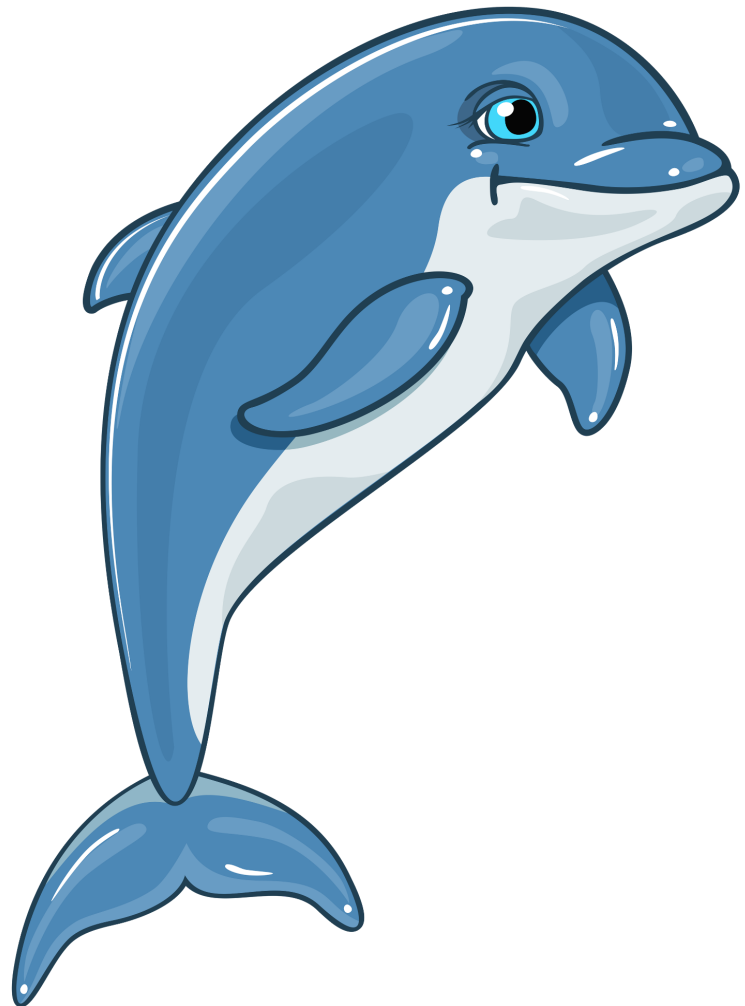
GitHub: albe194e

**GitHub repository:**

<https://github.com/MalikKtK/Delfin-Projekt>

**Trello link:**

<https://trello.com/b/L5C1EwyO/delfin-projekt>



# User stories

1.

**As the dolphin swimming club I want to develop an administrative system**

Accept criterias:

- *Manage customer-subscriptions.*
- *Contain customer-information.*
- *Contain swimming results.*
- *Contain contingent fees.*

2.

**As chairman I want to be able to register new customers**

Accept criterias:

- *Easy access to view data for customers.*
- *Add / remove customers from list.*
- *Set active / passive subscription.*

3.

**As chairman I want to register membership fee and arrange them by discounts**

Accept criterias:

- *For active members, the contingent for youth swimmers (under 18 years of age) is DKK 1,000 annually.*
- *For senior swimmers (18 years and over) DKK 1,600 annually.*
- *For members over the age of 60, a 25% discount is given on the senior rate which is equal to DKK 400 in this case. For passive membership, the fee is DKK 500 annually.*
- *Overview of how much the club can expect to receive in membership fees in total.*
- *Overview of members who are in arrears.*

4.

**As the chairman I want the information of the customer, when the customer has been registered in the system.**

Accept criterias:

- *Name/id*
- *Age*
- *Subscriptions*
  - *active/passive swimmers.*
  - *Junior (under 18), Senior (over 18) and elderly (60+) swimmers.*
  - *Exercise swimmers and competition swimmers.*

5.

**As a coach I have been assigned competition swimmers.**

Accept criterias:

- *Competition swimmers are separated in 2 different groups:*
  - *The first group consists of competition swimmers under the age of 18.*
  - *The second group consists of competition swimmers over the age of 18 (18+ and elderly (60+)).*

6.

**As a competition swimmer i've been registered in a swimming-discipline that i'm active in.**

Accept criterias:

- *Competition swimmers are registered in the following swimming-discipline categories they're active in:*
  - *Butterfly, Crawl, Backstroke and Breaststroke.*

**7. As a competition swimmer, the date of my swimming results and my best time in a specific swimming discipline is registered and continuously updated.**

Accept criterias:

- *Time, place and cups are registered for swimmers who have competed in swimming competitions in specific swimming-discipline categories.*
- *In order to compete in swimming competitions, the coach will choose swimmers with best results.*

**8. As a coach I want an overview of the top 5 best swimmers within the given swimming-disciplines.**

Accept criterias:

- *An overview of top 5 best swimmers in each category of swimming-disciplines for both groups (Under and over the age of 18).*

# Stakeholder analysis (Interessentanalyse)

## **Swimming club / PO (PRODUCT OWNER):**

- *Big influence.*
- *little contributions.*
- *Resource persons since we can come to them when there's a situation where we need input.*

## **Chairman(USER):**

- *Little influence.*
- *big contributions.*
- *A combination of resource person and working person, since their contributions are necessary but they don't have influence on what's gonna happen to the project.*

## **System developer:**

- *Little Influence.*
- *Big contributions.*
- *Like Chairman, they are a combination of resource person and working person. They do all the work for the product so it's necessary but they don't have influence on what's gonna happen to the project.*
- *Have to deliver a good product.*

## **Member:**

- *Their contribution isn't necessary.*
- *Little influence.*
- *Have to like the product since their opinion affects the swimming club.*

# Management plan (Håndteringsplan)

## **Swimming Club(PO)**

- *At the beginning of the project, there will be an ongoing dialogue with the swimming club's management regarding finances and requirements for the system etc.*
- *Every other week, a draft will be written of how far the team is developing with the system. It will include how far in the process they have come, what things are in place and what tasks need to be performed.*
- *Furthermore, there will be dialogue if any elements of the system can not be developed or there is an obstacle that needs to be resolved.*

## **Chairman (USER)**

- *Daily follow up, to keep mutual understanding.*
- *End of every week the chairman will be brought a beta product for testing, in order for Chairman to influence the final product and come up with possible changes or minor details of the product*

## **Development team**

- *Daily scrum meetings between the development team and the Scrum Master.*
- *Daily visualization of Scrum board using Trello visible to everyone on the development team.*

## **Members**

- *Members will not be contacted since the project is regarding a backlog system only visible for the owners of the swimming club.*

## Conflict of interest (Interessekonflikter)

There may be gaps between the management, the chairman and the developing team.

1. Disagreement about finances in relation to the project's ability.
2. Disagreement, about the user interface, if the chairman comes up with changes that potentially cost more than the management has set aside for the project.

### **Solution:**

Communication between the Swimming club and Development team is key.

The chairman needs great communication to the rest of the leaders of the club.



# Risk analysis

## ***Chairman leaves the project:***

Although the likelihood of the chairman leaving the project, it may be the project manager stopping and leaving the project, which may have a large following for the project. Therefore, it is important to have someone who is suitable to take over the task as chairman, as they control how things work in the project, making sure everything goes according to plan, etc.

## ***The swimminghall changes the structure:***

It may happen that the structure of the project changes. It could be if a management was fired and a new one was hired, etc. Therefore, it is important to keep track of what the customer wants from the project and what direction it should go in, as it can change very quickly if new people are involved.

## ***The code is not written correctly:***

New people can be hired to program the code, others can be fired, etc. And if you have not, for example, made diagrams, documented the code, etc., it will be difficult for a person who has taken over the job to know what is happening. And this can mean that the code does not become as good as it could be and you do not get a finished product. The same can happen if you do not get the code tested, review it, etc. This can lead to the code not being optimal, and thus you do not have a satisfied customer which can influence us.

## ***Lack of test:***

Testing is a crucial and important part of programming. As we want the customer to be satisfied with the finished product, and their meaning to the product is crucial and significant to us, it is important that we deliver a functional program. Therefore, it is good to have everything you do tested, as it can help us find bugs etc. And if this is not done, the customer may experience lots of errors, which affects us.

## ***Lack of finances:***

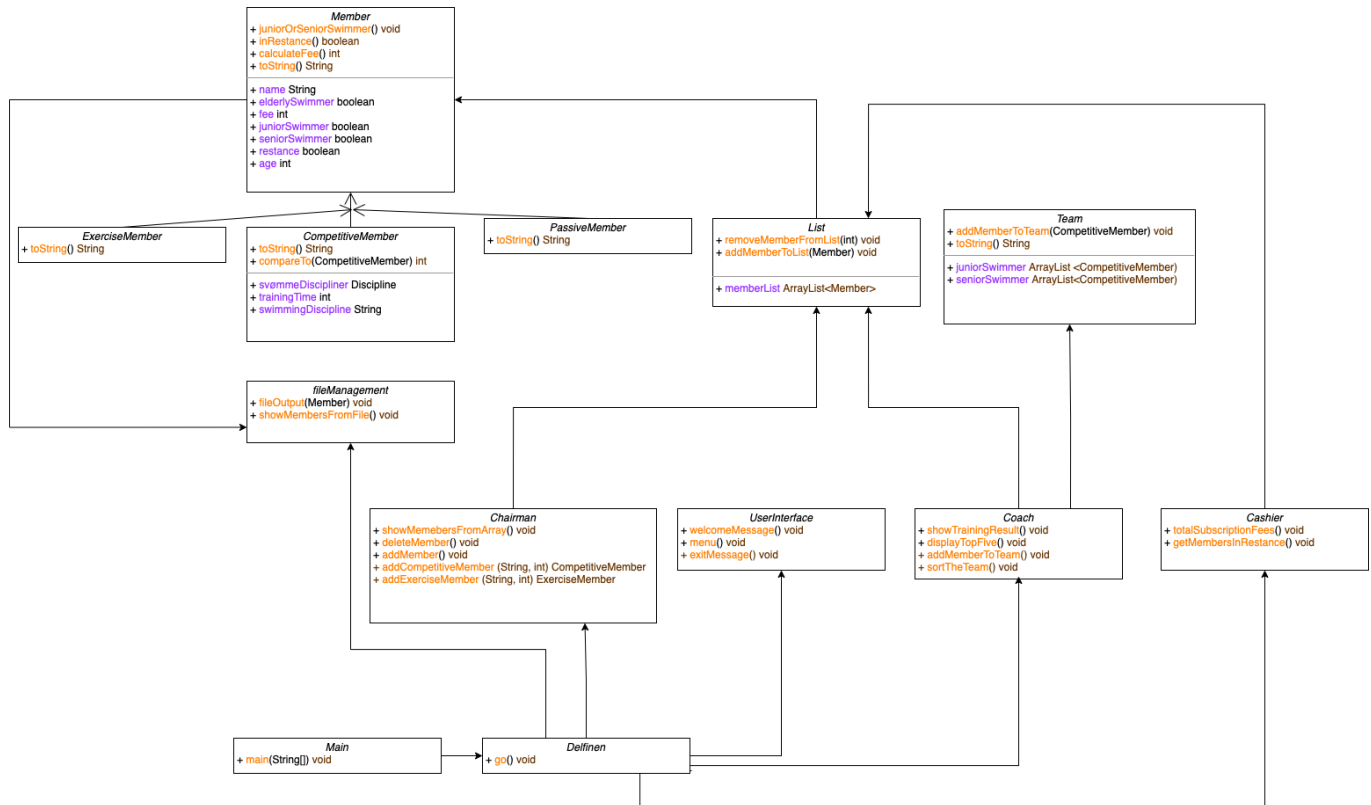
Finance is a very big and important part for companies. Finances are crucial for who you can hire, where you can use money and improve quality for the various places. Therefore, it is important that you make a budget, to get an overview of where there is a lack of spending money, where there is a lack of different things to improve the quality, etc.

<b>Projekt</b>				<b>Udfyldt af</b>	<b>Dato</b>
<b>What can go wrong?</b>	<b>Consequence</b>	<b>Probability</b>	<b>Risk Number</b>	<b>Actions</b>	
	(1-5)	(1-5)	(K x S)	<b>Preventive</b>	<b>Mitigating</b>
<b>Chairman leaves the project</b>	<b>5</b>	<b>1</b>	<b>5</b>	<b>Give him a good salary. Good benefits can mean you are satisfied with what you have.</b>	<b>Find a new chairman, and make sure to find the reason the previous chairman left so it does not happen again.</b>
<b>The swimminghall changes the structure</b>	<b>3</b>	<b>2</b>	<b>6</b>	<b>That you follow the plan as the swimming hall wants. You try to relate to their way and start a dialog if there's something you ain't happy about. That way, the swimminghall will be happy with what they get and not change structure.</b>	<b>Adapting to the new structure is and starts a dialogue with the management if you are not satisfied with the new structure.</b>

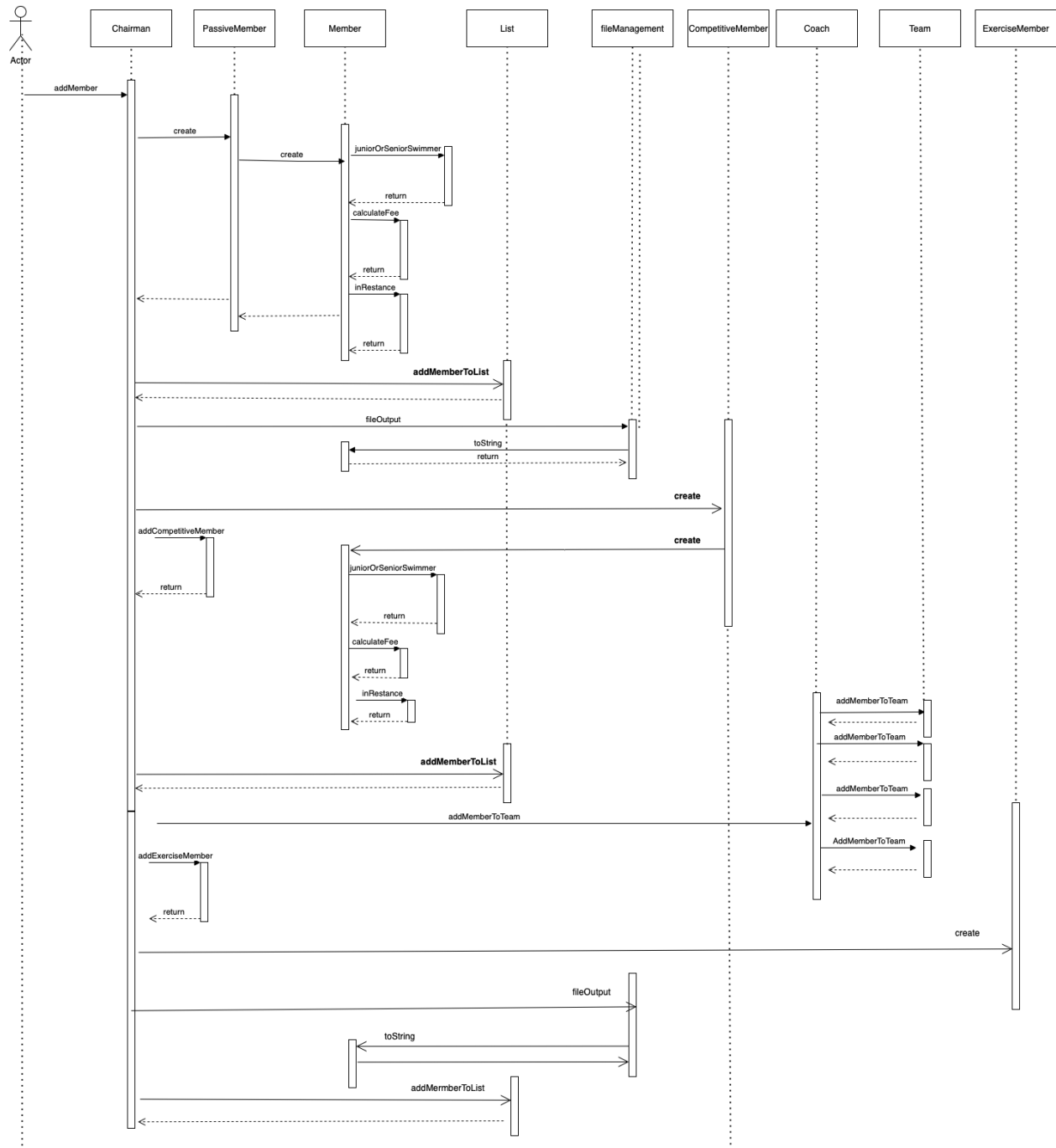
<i>The code is not written correctly</i>	<i>5</i>	<i>2</i>	<i>10</i>	<i>You test the code, stay on to the different code principles, you make sure that the project manager, ergo the chairman, approves what you have made. Good cooperation with your employees and good communication leads to good work.</i>	<i>It is to be expected that an employee may be replaced, and you must ensure good communication between management and the employees so that you are sure of what is desired by the project. If you are forced to start over, make sure that everything is checked, approved, tested, etc. So you are sure you are delivering a good product.</i>
<i>Lack of test</i>	<i>5</i>	<i>4</i>	<i>20</i>	<i>By testing the code, you are making sure everything is working correctly, the code is written properly. And therefore there is no bugs, glitches, etc. Because if you do not test it all, it can end up that there are many errors when the customer</i>	<i>If you have not tested everything and the customer receives a finished product with defects, you must also expect an employee to be replaced. Otherwise, of course, you have to correct your own mistakes by testing everything you code, so you are sure you are</i>

				<i>receives the finished product and they become dissatisfied.</i>	<i>handing out a product where the functions work as they should.</i>
<b><i>Lack of finances</i></b>	<b><i>4</i></b>	<b><i>2</i></b>	<b><i>8</i></b>	<b><i>That you set a budget on how much you have, how much you can spend, organize how the money is to be spent, etc. Finance is a very important point for companies, as it has a great impact on how the company works. In this case, if you are going to spend too much money on hiring people and you can not afford to pay for a proper program, etc.</i></b>	<b><i>If there is a lack of finances, you must at least make a budget. Start by saying, okay, where are we spending too much money? Once you have figured out where the money is being spent the most, you may be able to find a way to reduce the amount there so that the rest can be transferred to another location.</i></b>

# Class diagram

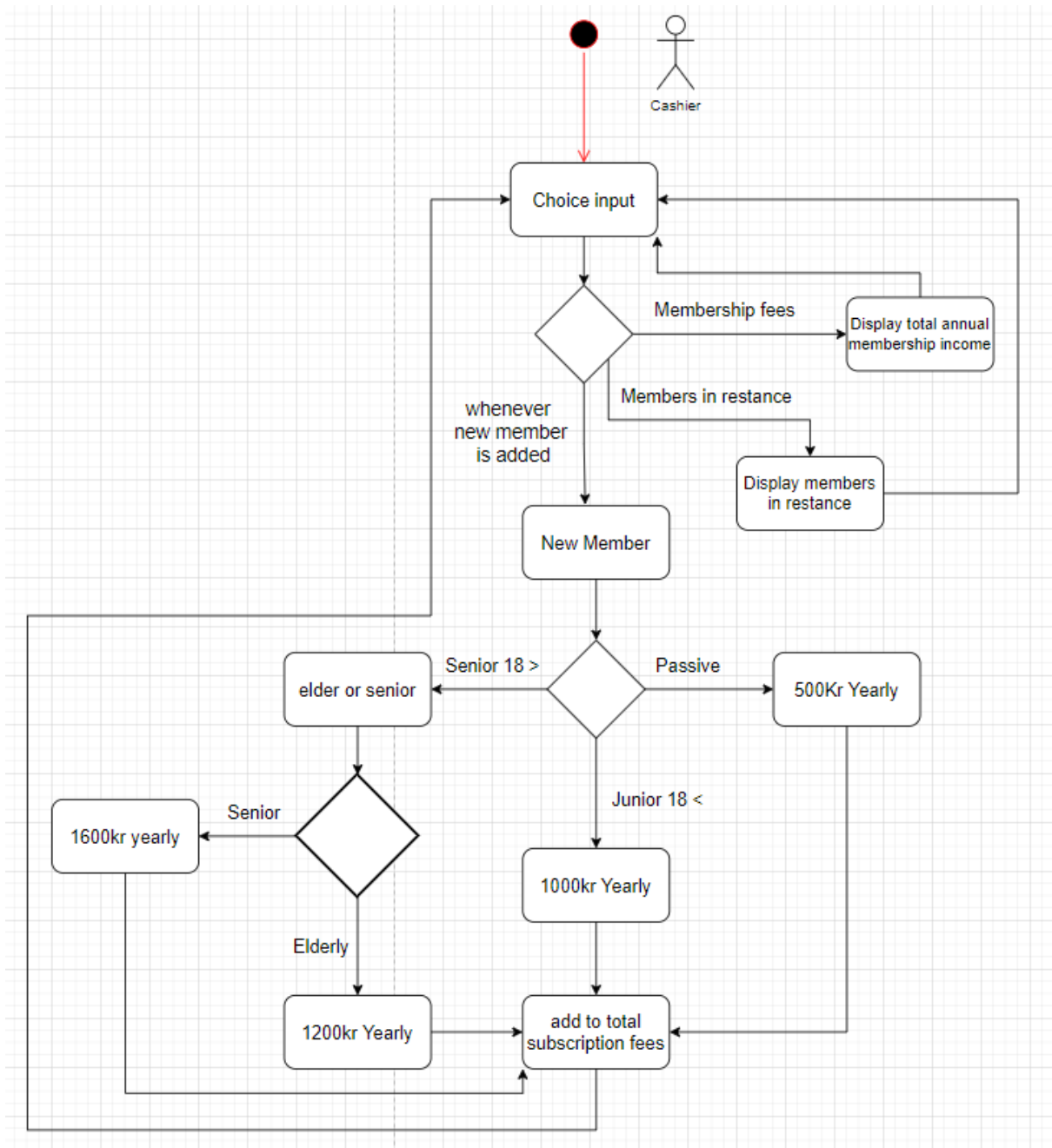


# Sequence diagram

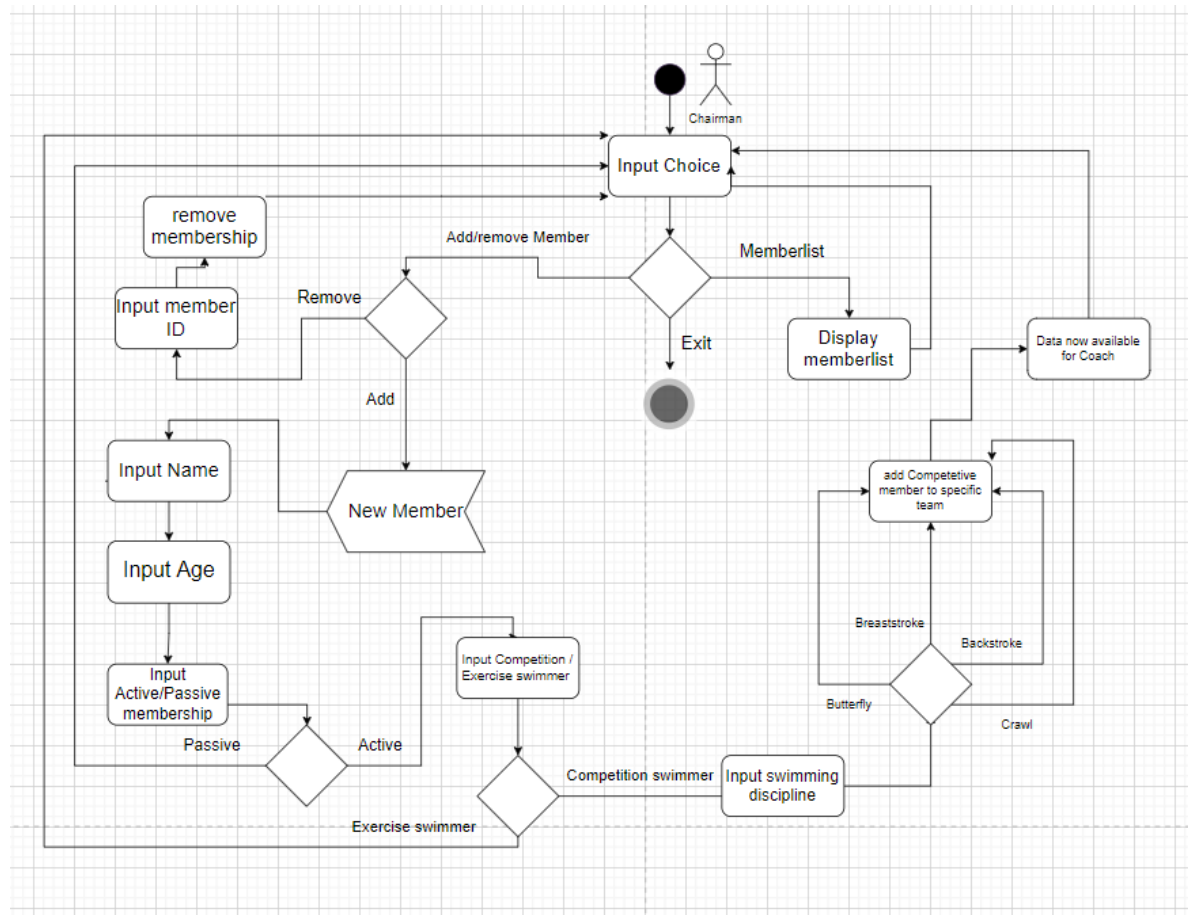


# Activity diagrams

Kasserer:

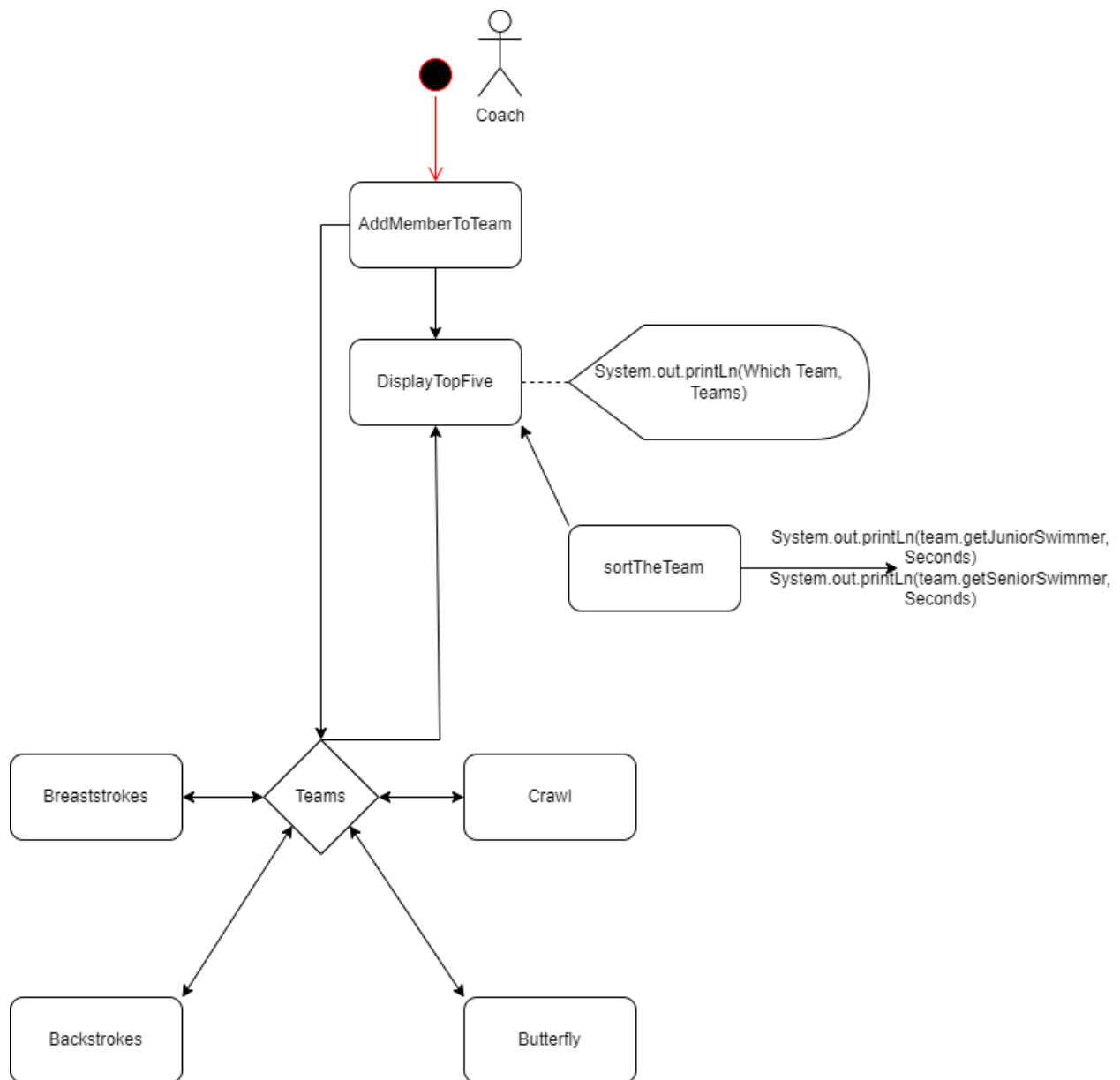


Chairman:





Coach:



# Domain model

