User requirements

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Form questions and answers given by interviewees

- 1. The autonomous assistance boat can be a helpful tool for saving people overboard. Yes\No
- 2. The autonomous assistance boat can be a helpful tool for a lifeguard. Yes\No
- 3. Shape: (single choice)
 - (a) The person should be able to grab on it, similar to safety ring.
 - (b) The person should be able to grab on it and lay on it, like a stretcher.
 - (c) Other:
- 4. Accesories: (multiple choice)
 - (a) Camera documet the mission
 - (b) Warning lights
 - (c) First aid kit
 - (d) Warning sound
 - (e) Showing temperature of water
 - (f) Other:
- 5. Is it important that the boat/buoy is helping the lifeguard to get to the person? Yes\No
- 6. Does it make sense that there will be something that holds the lifeguard to the boat so he can take care of the drowning person during coming back to the shore? Yes\No
- 7. Does the colour of the boat matter? Yes\No
- 8. If the colour matters, what colour should it be? (Specify if required by law) Written answer by interviewee.

- 9. From your experience what is the average distance [m] from shore to the victim? (multiple choice)
 (a) 100
 - (b) 200
 - (c) 300
 - (d) 400
 - (e) 500
 - (f) Other:
- 10. What is the maximum time [min] in which the lifeguard should get to the drawning person so the suferer can be saved in order to survive? (multiple choice)
 - (a) 1
 - (b) 2
 - (c) 3
 - (d) 4
 - (e) 5
 - (f) More than 5
 - (g) Other:
- 11. What is the biggest distance [m] from the shore that the suferer is saved at? Written answer by interviewee.
- 12. What was the longest time [min] it took you to complete a rescue (time spent in water)? (multiple choice)
 - (a) Up to 10
 - (b) Up to 20
 - (c) Up to 40
 - (d) Other:
- 13. Other suggestions and features that you would like to have on your autonomous assistant. Written answer by interviewee.

Conclusion

The sum up of the user input gives the feedback of the fact that the autonomous life saver boat can be useful project used in real life. The interviewees answers conclude to mentioned below user requirements. The ones with the star are "need to have" the other ones are "nice to have".

- Shape of the boat:
- Accesories of the boat:
- Help with getting to the drwoning person.
- $\bullet\,$ Holder to the boat for the life guard.
- Colour of the boat: bright, consistent with Denmark's law. Even thought the answers are not clear-cut for the unimportance of the colour, looking at the law regualtions and visiblness on the water it is good to have a bright, clearly visible colour.
- The boat should be able to achive at least 200 m distance from the shore.
- The logest time of getting to the drowning person should not go beyond
- The longest time the boat should be able to work on the water without recharging should total