

User requirements

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Form questions and answers given by interviewees

The form was sent to lifeguards from Denmark and Poland. It was filled out by 5 people.

1. The autonomous assistance boat can be a helpful tool for saving people overboard.
Yes (100%)
No (0%)
2. The autonomous assistance boat can be a helpful tool for a lifeguard.
Yes (100%)
No (0%)
3. Shape: (single choice)
 - (a) The person should be able to grab on it, similar to safety ring. (20%)
 - (b) The person should be able to grab on it and lay on it, like a stretcher. (80%)
 - (c) There should be a platform on a boat, that allows the lifeguard to start saving the sufferer after getting to them on the water. (20%)
4. Accessories: (multiple choice)
 - (a) Camera - document the mission (20%)
 - (b) Warning lights (100%)
 - (c) First aid kit (40%)
 - (d) Warning sound (80%)
 - (e) Showing temperature of water (0%)
 - (f) 5-min oxygen bottle (40%)
5. Is it important that the boat/buoy is helping the lifeguard to get to the person?
Yes (100%)
No (0%)
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 (100%)
No (0%)
7. Does the colour of the boat matter?
Yes (60%)
No (40%)
8. If the colour matters, what colour should it be? (Specify if required by law)
Written answer by interviewees:
 - (a) Bright, regulated by rules for country's regulations.
 - (b) Bright, visible, red would be the best.
 - (c) Bright, fluorescent.

9. From your experience what is the average distance [m] from shore to the victim? (multiple choice)
 - (a) 100 (75%)
 - (b) 200 (25%)
 - (c) 300 (0%)
 - (d) 400 (0%)
 - (e) 500 (0%)
 - (f) Other: (0%)
10. What is the maximum time [min] in which the lifeguard should get to the drowning person so the sufferer can be saved in order to survive? (multiple choice)
 - (a) 1 (0%)
 - (b) 2 (20%)
 - (c) 3 (20%)
 - (d) 4 (20%)
 - (e) 5 (20%)
 - (f) 6
 - (g) More than 6 (20%)
11. What is the biggest distance [m] from the shore that the sufferer is saved at?
Written answer by interviewees:
 - (a) It depends on the time of apnoea, not the distance.
 - (b) 90.
12. What was the longest time [min] it took you to complete a rescue (time spent in water)? (multiple choice)
 - (a) Up to 10 (40%)
 - (b) Up to 20 (40%)
 - (c) Up to 40 (20%)
13. Other suggestions and features that you would like to have on your autonomous assistant.
No given answer by interviewees.

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: the person should be able to grab on it and lay on it, like a stretcher.
- Accessories of the boat: camera - document the mission, warning lights, first aid kit, warning sound, 5-min oxygen bottle.
- Help with getting to the drowning person.
- Holder to the boat for the lifeguard.
- Colour of the boat: bright, clearly visible colour, regulated by country's regulations.
- The boat should be able to achieve at least 200 m distance from the shore.
- The longest time of getting to the drowning person should not go beyond more than 6 min.
- The longest time the boat should be able to work on the water without recharging should total 30 min.