Team Name:

ZORO

Team members:

Md. Sabbir Ahmed

sabbir.name.mist@gmail.com

01830320930

S M Saimoon Rehan Abdee

saimoonabdee@gmail.com

01766514425

Principal Particulars:

LOA =16 m

Breadth = 7 m

Draft = 1.4 m

Uniqueness of our design

- 2 VIP bedrooms, with each bedrooms there will be a bathroom , tv, bed, also glass door for view of outside scenario , a private drawing space to enjoy quality time, glass railings
- A fine galley, with a dinning space
- Aquarium, which serves as a tool for conservation and education, allowing people to learn about and appreciate marine life
- Hexagonal roof-top to enjoy a 360 view of kaptai lack
- Sunbathing area
- Solar panel

Safety measures taken

There are many safety measures that can be incorporated in our ship's design to ensure the safety of the crew and passengers. Some examples include:

1. Watertight compartments: can be used to isolate and contain flooding in the event of a leak or collision.
2. Emergency escape routes: includes emergency exits, lifeboat and life raft systems, and evacuation slides.
3. Fire suppression systems: includes fire alarms, sprinkler systems, and fire extinguishers.
4. Stability systems: includes ballast tanks, bilge keels, and other devices that help to keep the ship stable in rough sea condition.
5. Navigation and communication systems: includes radar, GPS, and other navigation aids, as well as communication systems that allow the crew to contact with rescue teams in the event of an emergency.
6. Lifesaving appliances: such as life rafts, immersion suits, life jackets, etc.
7. Safety management system (SMS): A comprehensive system to ensure safety on board and compliance with international safety regulations.

Technologies

1. Marine propulsion systems: can include traditional diesel engines and electric or hybrid propulsion systems.

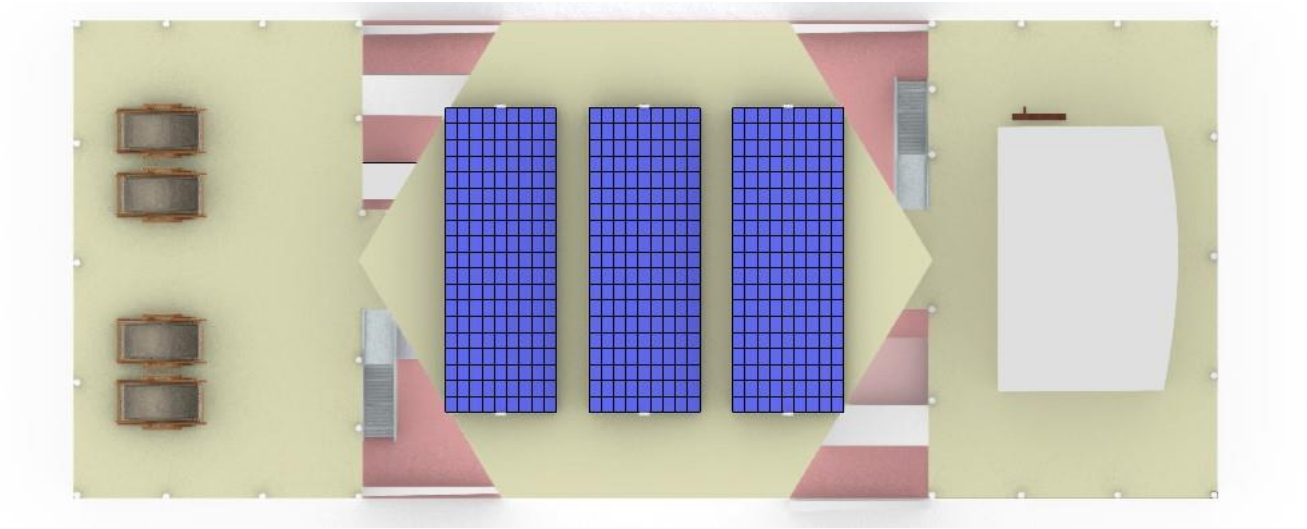
2. Navigation and communication systems: includes radar, GPS, and other navigation aids, as well as communication systems that allow the crew to contact rescue teams in the event of an emergency.
3. Automation systems: includes automated steering and propulsion systems, as well as systems that can monitor and control various shipboard functions such as lighting, temperature, and security.
4. Ballast water treatment systems: to comply with regulations regarding the discharge of ballast water and prevent the spread of invasive species.
5. Energy efficiency systems: includes energy management systems, waste heat recovery systems, and systems that can generate electricity from renewable sources such as solar power.
6. Cybersecurity systems: to protect ship's control systems and navigation equipment from cyber-attacks.
7. Advanced sensor systems: such as infrared cameras, lidar, ultrasonic sensors and alarming sensors which can be used for navigation and collision avoidance.
8. Remote monitoring and control systems: that allow ship operators to monitor and control their vessels remotely.
9. Autonomous systems: such as autonomous ships, which can be operated without human intervention.

Environmental impact

Design features of our ship to reduce the above environmental impact

1. Using cleaner fuels: Our Ship is designed to use alternative fuels such as liquefied natural gas (LNG) or biofuels, which can significantly reduce emissions of sulfur dioxide, nitrogen oxides, and particulate matter.
2. Improving energy efficiency: designed to be more energy-efficient by using advanced propulsion systems, such as hybrid or electric propulsion systems, and by optimizing the ship's hull design to reduce resistance and improve fuel efficiency.
3. Incorporating emissions control systems: equipped with emissions control systems such as exhaust gas scrubbers, which can reduce emissions of sulfur dioxide and particulate matter.
4. Ballast water treatment systems: equipped with Ballast Water Management Systems (BWMS) to treat and disinfect the ballast water before it is discharged, in order to prevent the spread of invasive species.
5. Incorporating waste management systems: designed to have proper waste management systems to reduce the amount of waste, including plastics, that is discharged into the ocean.
6. Incorporating noise-reducing technologies: designed to reduce noise pollution by using quieter propellers, engines and other equipment.
7. Incorporating systems for monitoring and reporting environmental performance: equipped with systems for monitoring and reporting environmental performance, such as emissions monitoring systems, in order to comply with international regulations and to allow ship operators to monitor and improve their environmental performance.
8. Incorporating green technologies such as solar panels to generate electricity on board.
9. Waste management: There will be a holding tank that can be pumped out when house boat is docked

Drawing of the houseboat:



TOP VIEW

(Sun bathing chair, Solar panel, Wheel house)

RHS View

LHS View

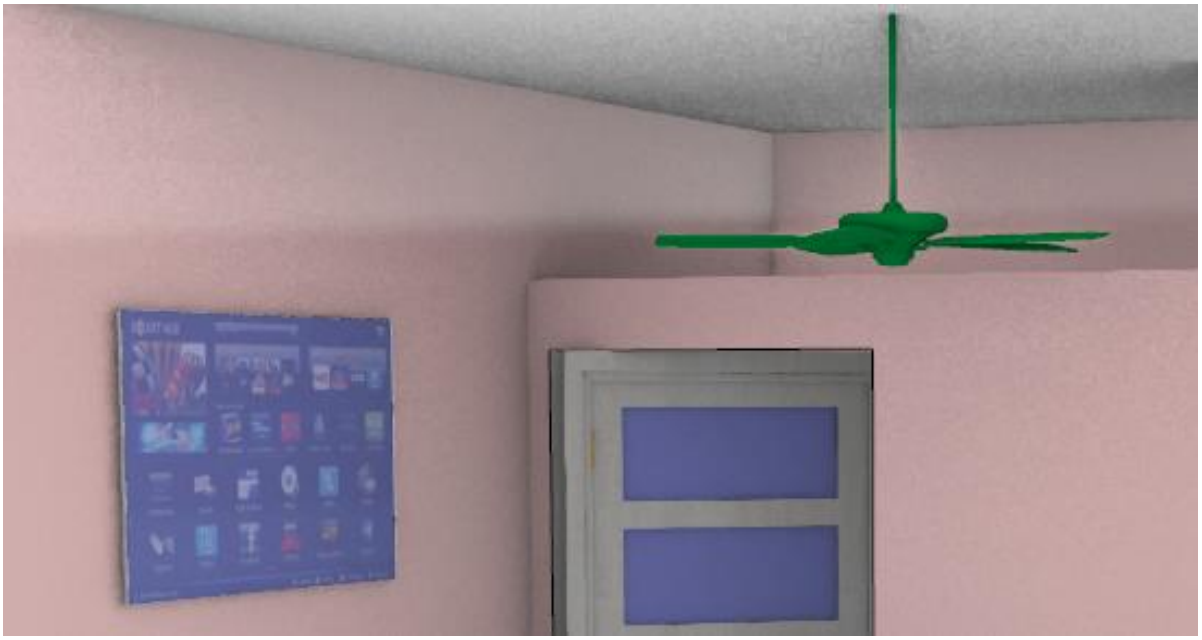
Froward View

Aft View

Cross sec views of VIP bed-room

Corridor

Bed



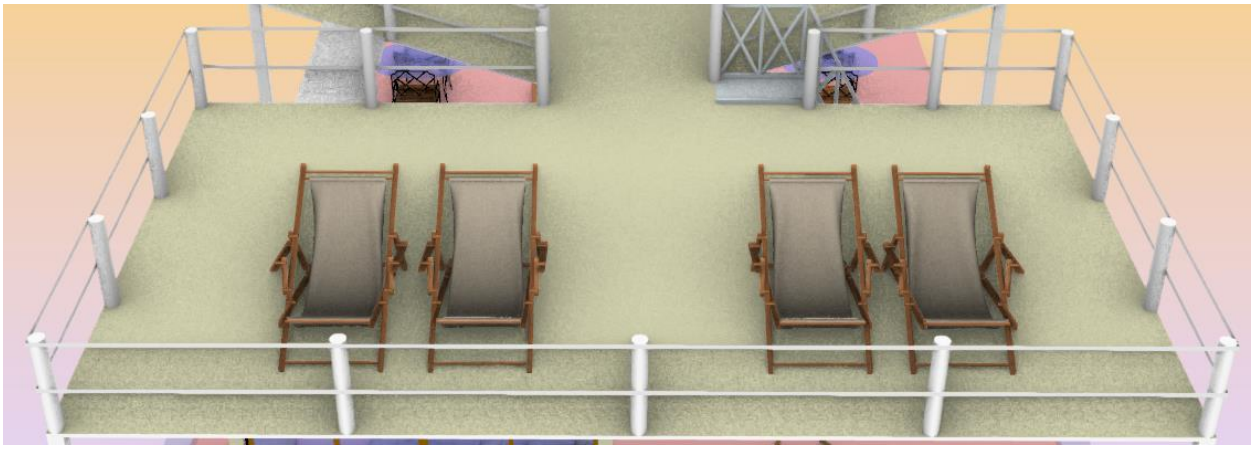
Fan and TV

Bathroom

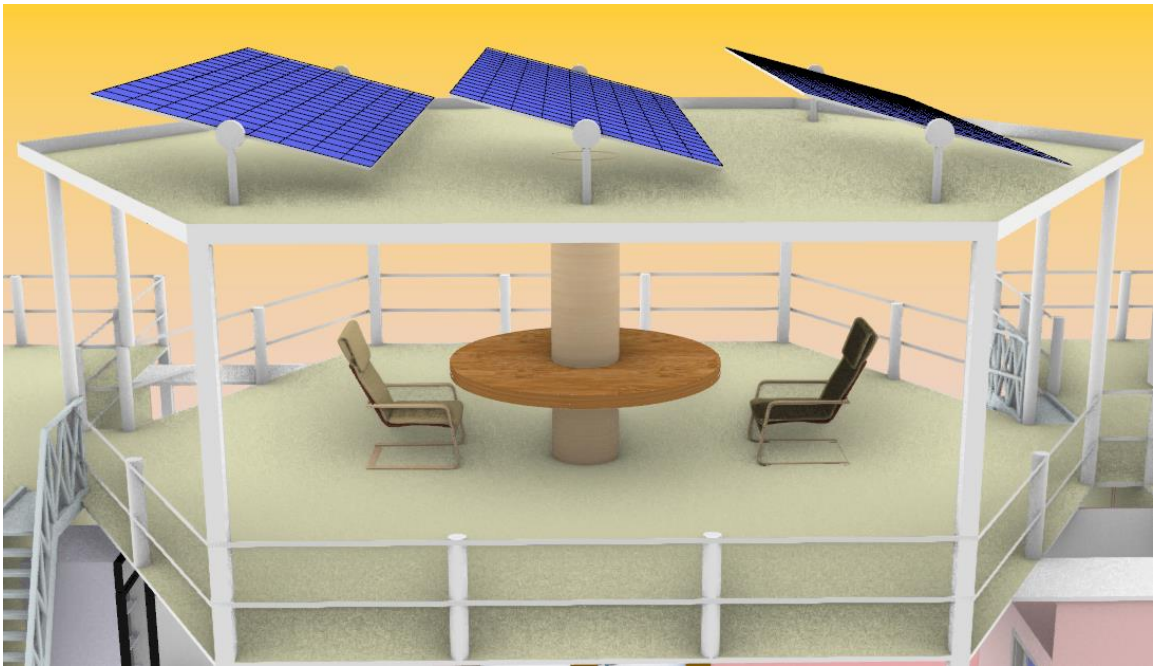
Aquarium and Dinning place

Galley

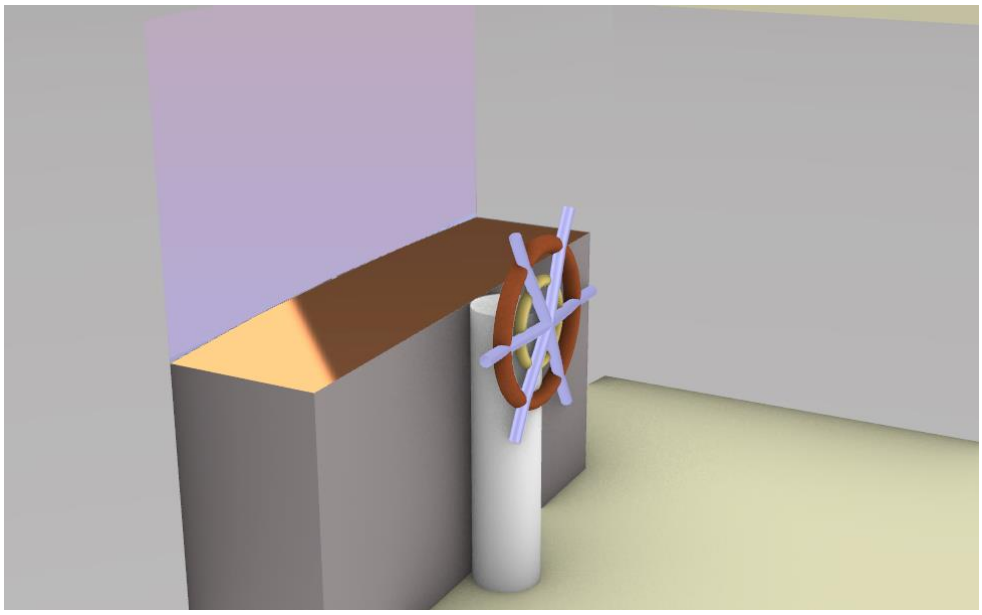
Two Staircases



Sun bathing chair



Upper deck sitting place



Steering