TEAM XPLORER

About us :-

TEAM LEADER :- SOUMADIP SANTRA

This PROJECT is completed by

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PROJECT NAME :- WEB-ACCESSIBLE ELEVATORS
PROJECT TOPIC :- Digital Elevator Management System
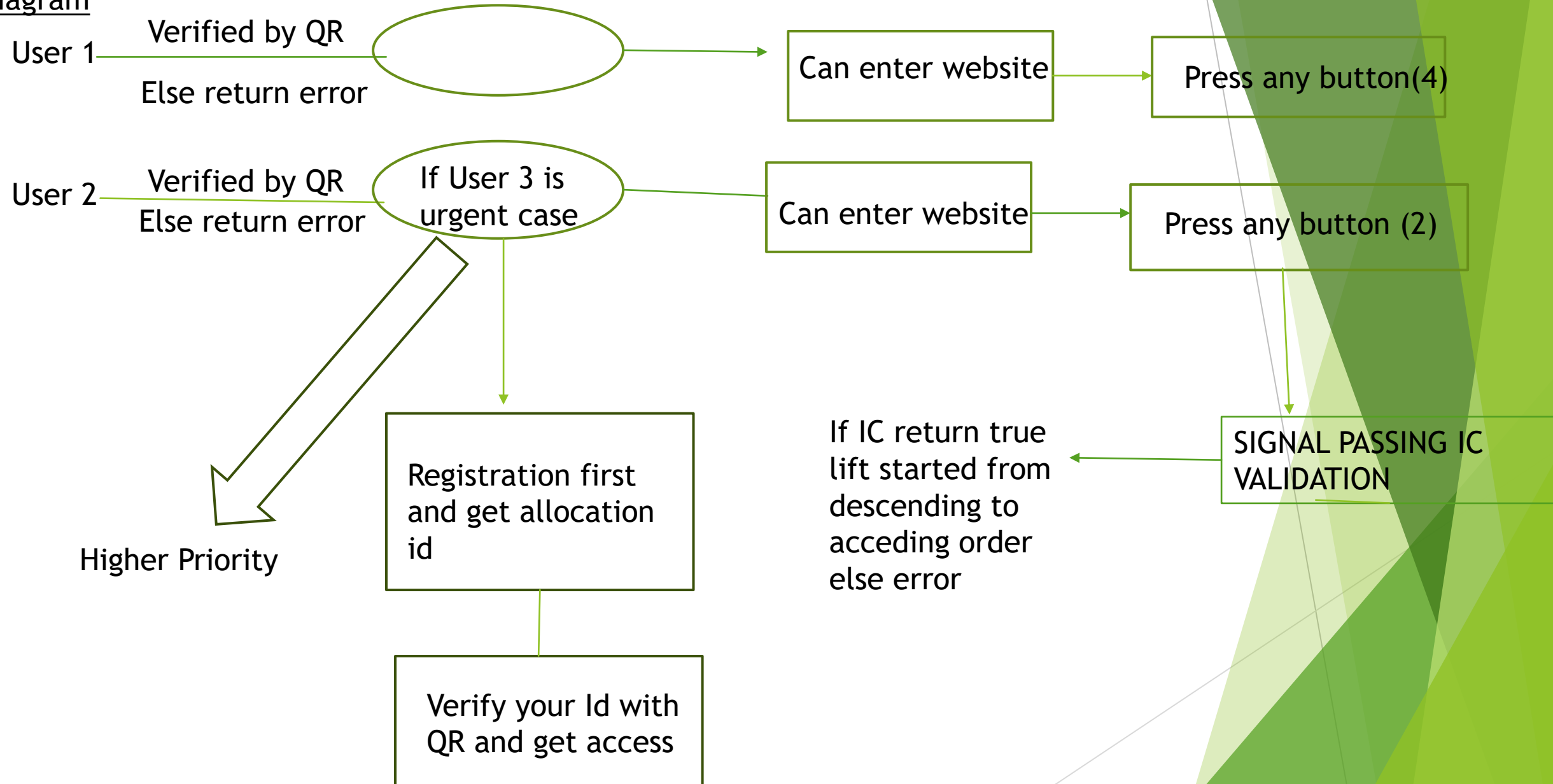
PROJECT DESCRIPTION :-

- **INTRODUCTION :-**

This project is based upon a website using HTML,CSS,JS and QR code is implemented by using Python.

- **PROJECT IDEA :-**

1. If there is a malfunction in digital button of the elevator, then a person can access the elevator by using digital button and her identity is verified by the QR code provided by the website and can reach his/her required floor of the building.

2. If a normal person gets in the elevator with a person in emergency condition, then the person in emergency can generate a QR code id from the website which will enable the person in need to reach his/her destination.

3. Senior citizens will also get the first priority comparing to the other persons present in the elevator except the person in emergency .

Diagram

User 1 —— Verified by QR

Else return error

Can enter website → Press any button(4)

User 2 —— Verified by QR

Else return error

If User 3 is urgent case

Can enter website → Press any button (2)

Higher Priority

Registration first and get allocation id

Verify your Id with QR and get access

If IC return true lift started from descending to acceding order else error ← SIGNAL PASSING IC VALIDATION

FUTURE SCOPE :-

1.**Mobile App Integration**: Create a mobile app for elevator access and management.
2.**Elevator Monitoring**: Implement real-time monitoring for malfunctions and maintenance alerts.
3.**Smart Building Integration**: Link elevators with other building systems for seamless interaction.
4.**User Profiles**: Enable user preferences like favorite floors and accessibility settings.
5.**Enhanced Emergency Response**: Improve emergency communication and assistance features.
6.**Data Analytics**: Gather usage data for optimization and informed decisions.
7.**IoT Integration**: Include IoT devices for automatic user recognition.
8.**Voice/Gesture Control**: Explore voice and gesture commands for elevator interaction.
9.**Multi-Language Support**: Extend language options and accessibility features.
10.**Security & Privacy**: Implement robust encryption and privacy safeguards.
11.**Building Management Integration**: Collaborate with building systems for coordination.
12.**AI Integration**: Use AI to predict usage patterns and optimize routing.
13.**User Feedback System**: Add user feedback and rating features for improvement.
14.**Global Scalability**: Plan for diverse building types and international expansion.