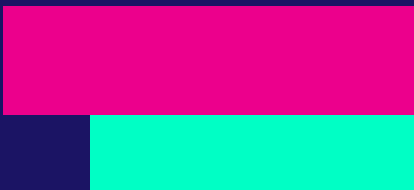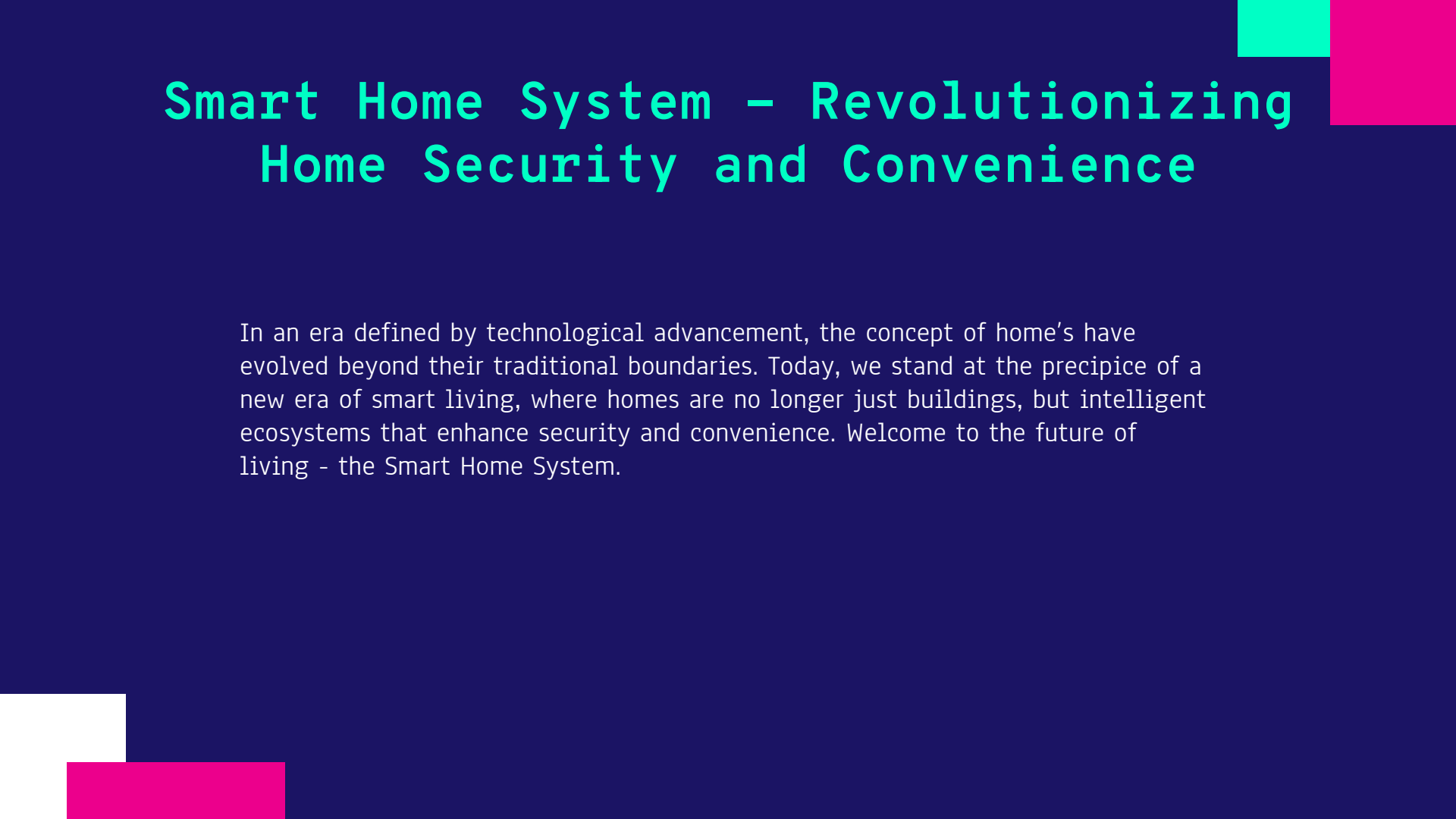# Smart Home System

By: Asfandiyar, Vaishnavi, Vivien, Isha, Vy, Erica

Smart Home System – Revolutionizing Home Security and Convenience

In an era defined by technological advancement, the concept of home's have evolved beyond their traditional boundaries. Today, we stand at the precipice of a new era of smart living, where homes are no longer just buildings, but intelligent ecosystems that enhance security and convenience. Welcome to the future of living - the Smart Home System.

The Domain – Smart Home Technology

The realm of smart home technology is a captivating intersection of innovation, convenience, and security. It encompasses a wide range of interconnected devices and systems designed to make our lives easier and safer. At its core, this technology empowers us to control and monitor various aspects of our homes remotely.

The Necessity – Why Smart Homes?

- Security: With rising concerns about home security, a Smart Home System provides advanced intrusion detection and access control, using cutting-edge technologies such as cameras, sensors, RFID tags, and more.

- Convenience: Imagine a home that adapts to your preferences, turning on lights, adjusting the thermostat, and even brewing your morning coffee as you wake up - all automatically.

- Energy Efficiency: Smart homes optimize energy consumption, reducing your carbon footprint and saving you money on utility bills.

Functional Key Features - Making Life Smarter

Access Control	Remote Controller	Lock Control	"Live-in-look" Control

Know who enters your home and when

Manage your smart home from your smartphone

Secure entry points to your home

Timers to control lights, A/C, TV, sound, etc.

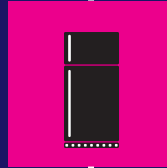# More Key Features — Making Life Smarter

Status Report

Get real-time updates on your home's security and status

Voice Control

Voice assistant integration for hands-free control

Smart Appliances

Control smart appliances for added convenience

Water Leak Detection

Sensors that detect water leaks. Shut off water to prevent damage

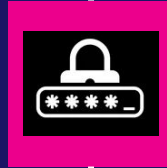# More Key Features – Making Life Smarter

Geofencing

Based on the user's location the system should be able to disarm and arm accordingly
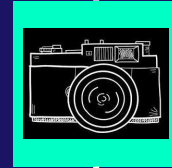
Event Logging

There should be a log of all security events including past alerts, system status (arming and disarming of system)

User Authentication

Users who are utilizing the system to change specific settings or controls should be password protected
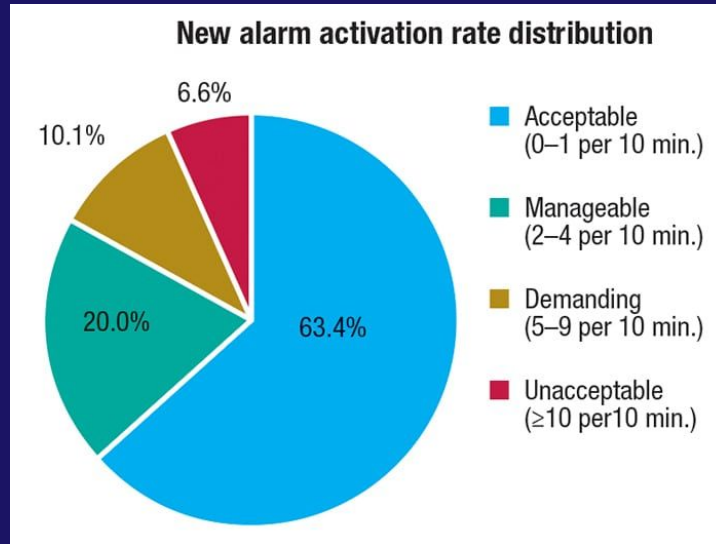
Surveillance

Users can see footage of different areas of their property with streaming and playback

Example of a Non-functional feature

Performance - Related to Response Time
- The system should state what the maximum response time is for alarm activation and other server requests.
    j

Non-functional requirements:

Security and Encryption standards
- The system should state what the maximum response time is for alarm activation and other server requests

Potential Challenges

- Many preventative measures to consider for security and privacy for users
- Understanding how to connect the system in a user's home to our server

Potential Strategies

Copy paste this slide whenever u need to add more :)