COMSATS UNIVERSITY ISLAMABAD

ABBOTTABAD CAMPUS

MID LAB

PREPARED BY: Hammad Fareed

Registration No: SP23-BSE-160

CLASS: BSE-5A

COURSE: SDA

ASSIGNMENT NO: MID-LAB

Business Use Case: NOTIFY GUARDIAN

Pattern Used: Observer Pattern

Because:

Automatic Notification System: When sensor detect dangerous activity then guardian automatically gets alert.

Coupling: There is no connection between sensor and guardian if user have to change guardian contact then it can be changed easily without changing in code. This flexibility is provided by Observer Pattern.

Multiple Listner: It is easy in observer pattern to handle multiple listner if notification has to be sent to multiple user
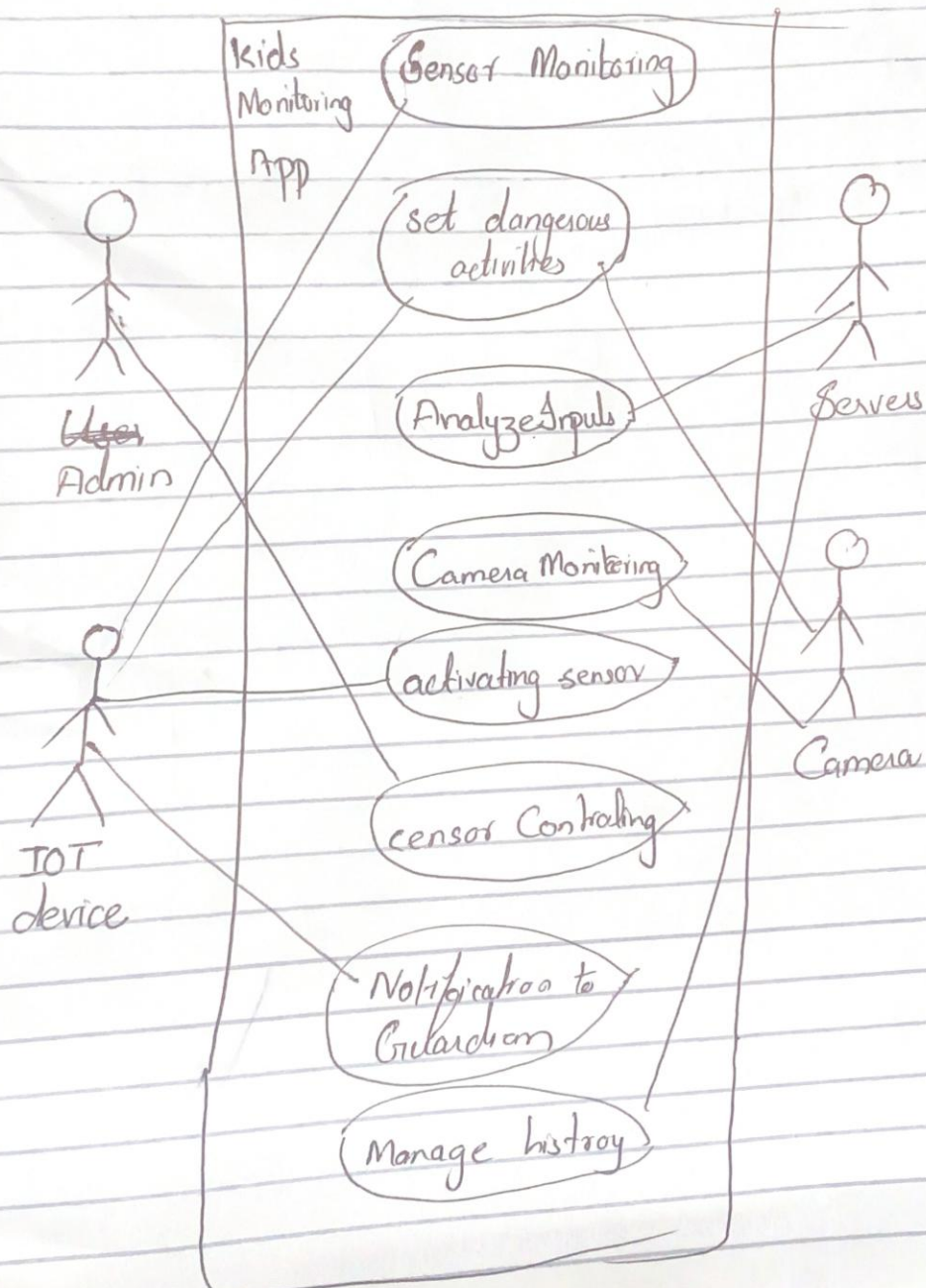
Real-Time Response: If any activity is detect observer pattern sends notification in real-time.

Scalibility: If add any feature or functionality just update observer pattern not need to change whole code.

USE-CASE DIAGRAM:

HAMMAD FAREED
SP23-BSE-160

KIDS MONITORING APP

Use case diagram — Kids Monitoring App

Actors: User/Admin, IOT device, Server, Camera

Use cases:
- Sensor Monitoring
- set dangerous activities
- Analyze Impuls
- Camera Monitoring
- activating sensor
- censor Controling
- Notification to Guardian
- Manage history

COMMUNICATION DIAGRAM: