

FUNCTIONAL REQUIREMENTS DOCUMENT(FRD)

Application Design and Planning

Version History:

Phase	Version Number	Version Name	Author	Features	Changes
I	v1.0	Surveillance-v1.0		Appendix-A	Backend developed
II	v2.0	Surveillance-v2.0		Appendix-B	Frontend developed
III	v3.0	Surveillance-v3.0		Appendix-C	Integration of backend + frontend
IV	v3.1.0	Surveillance-v3.1		Appendix-D	Deployment (logical) architecture
V	v3.2.1	Surveillance-v3.2.1		Appendix-E	Android/Tab App
VI	v3.2.2	Surveillance-v3.2.2		Appendix-F	iOS App

Technology Stack: MVC Frameworks

A. Backend:

1. Python- Machine Learning
2. Java- Network security and Firewall and stable ML backend
3. Node JS- Notification system
4. C#- Biometric

B. Frontend:

1. React JS/React Native- (SPA) Single Page application
2. Angular JS- Portal system

Hardware Requirements:

- A. External User- Laptop, Desktop, Mobile Phone, Tab
- B. System User- Tab
- C. Camera Surveillance on office corridors
- D. HOLOGRAM hardware projectors on office corridors for guidance

Database:

- A. Relational DB: PostgreSQL (Python django), Oracle (JAVA), MSSQL(C#)
- B. Non-relational DB: MongoDB (Node JS)

APPENDICES:

APPENDIX—A

Backend developed: Python, JAVA, Node JS, C#

APPENDIX—B

Frontend developed: React JS, Angular JS

APPENDIX—C

Integration of backend + frontend: Dependable

APPENDIX—D

Deployment (for logical) architecture:

1. Testing Plan
2. Deployment
3. Containerization
4. Data Center
5. Data Disaster Recovery
6. Local deployment of the system monitoring
7. Global deployment of the website for visitor registration

APPENDIX—E

Android: (Kotlin/) JAVA on Android Studio

APPENDIX—F

iOS: Swift

Bug History:

Version Number	Test ID	Bug ID	Reporting date	Description	Severity Level	Bug Status	Tested by	Test Procedure	Tested Date
v1.0	1	1	03-03-2020	Assemble a team for project-Surveillance System	Severe	Pending	Ishita K	Plan and Design the project	02-09-2020