PROJECT DESIGN PHASE-II

Technology Stack (Architecture & Stack)

| Date	14 October 2022
Team ID	PNT2022TMID38277
Project name	Natural disaster intensity analysis and classification using artificial intelligence
Maximum marks	4 marks

Technical Architecture:

| 5. Pandemic management | → | 5a. Diagnosis of pandemic | → | 5b. Social distancing |

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5. Pandemic           →    5a. Diagnosis of    →    5b. Social distancing
   management                  pandemic                      |
       |                                                      ↓
       ↓
6. Challenges, open          5d. Classify areas into    ←   5c. Extent to which
   issues and future            red, green, orange           economy is affected
   research directions          according to spread
                                during pandemic
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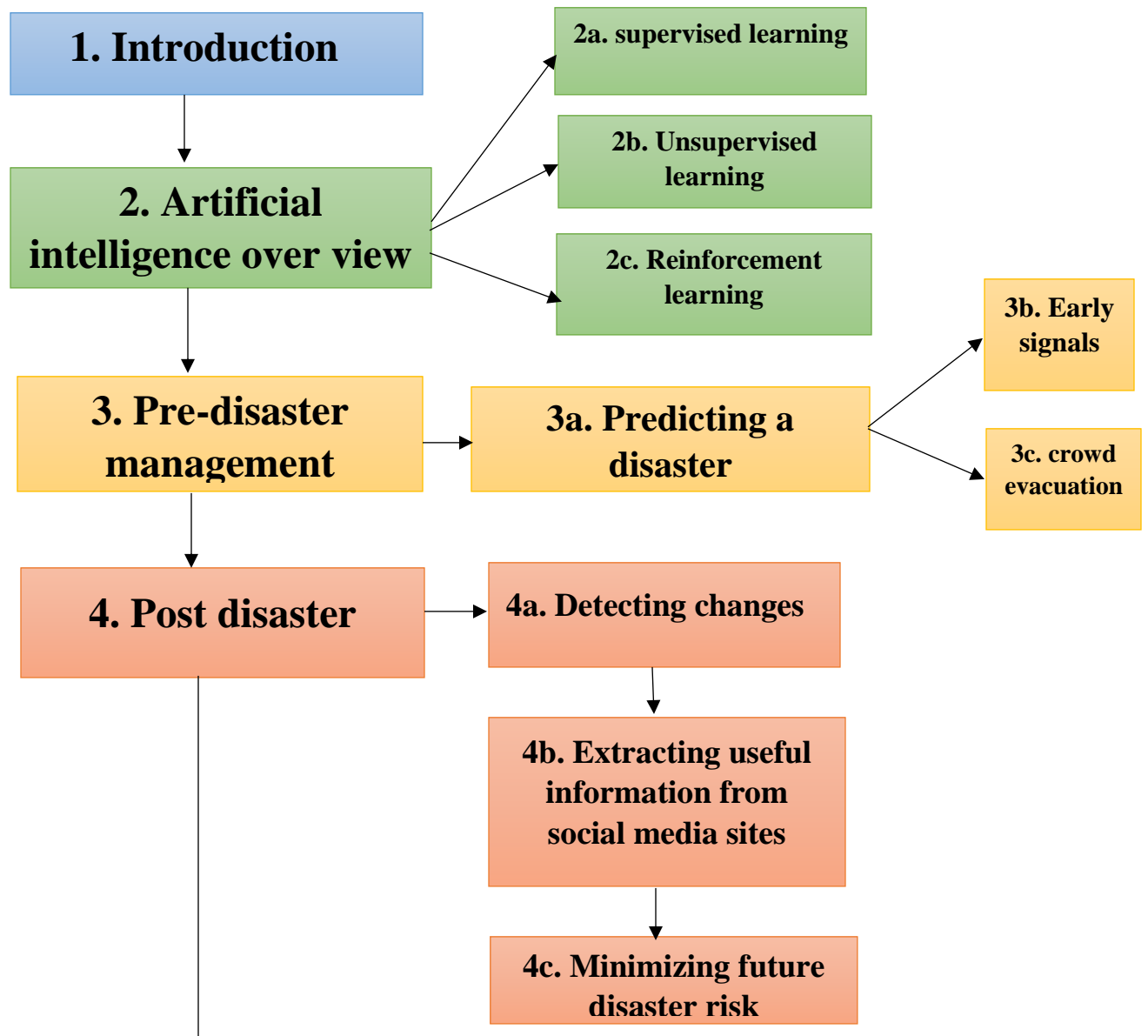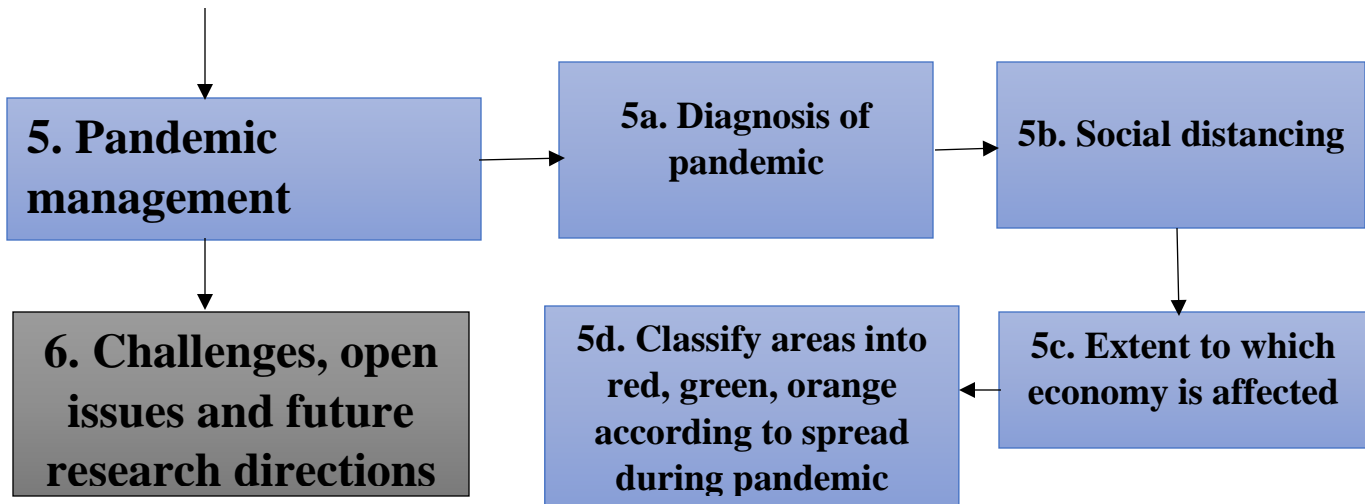
Table-1: Components and Technologies

S.no	Component	description	technology
1.	Support vector machine	Logic for process in the application	Python, SQL
2.	Linear	Logic for a process in the application	AI
3.	Database	Datatype, configurations, etc.	MySQL, NoSQL, etc.
4.	Pooling layer	Database service on cloud	IBM DB2, IBM Cloudant, etc.
5.	File storage	File storage requirements	IBM block storage or other storage service or local file system
6.	Decision tree	Purpose of external API used in the application	IBM weather API, etc.
7.	External API-2	Purpose of external API used in the application	Aadhar API, etc.

Table-2: Application Characteristics

S.no	characteristics	description	technology
1.	Open-source frameworks	Functional discriminant analysis	Source code, design documents
2.	Security implementations	Geographical information to share problems in prediction	Seismographs, creepmeters
3.	Scalable architecture	Signal processing, image processing are using scalable natural disasters	GPS (global positioning system)
4.	Availability	AI system information from seismic imaging earthquake predictors solve some techniques	NDRF, seismic intensity meters
5.	Performance	Web-enabled awareness research network can help save lives and limit the impacts of natural disasters	Land-based sensors, radar sensors.