**PROJECT DESIGN PHASE-II**

**Technology Stack (Architecture & Stack)**

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

**Technical Architecture:**

**2a. supervised learning**

**wsijw**

1. **Introduction**

**4b. Extracting useful information from social media sites**

**4a. Detecting changes**

**4. Post disaster**

**3c. crowd evacuation**

**3b. Early signals**

**3a. Predicting a disaster**

**2c. Reinforcement learning**

**2b. Unsupervised learning**

**3. Pre-disaster management**

**2. Artificial intelligence over view**

**4c. Minimizing future disaster risk**

**6. Challenges, open issues and future research directions**

**5d. Classify areas into red, green, orange according to spread during pandemic**

**5c. Extent to which economy is affected**

**5b. Social distancing**

**5a. Diagnosis of pandemic**

**5. Pandemic management**

**Table-1: Components and Technologies**

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| --- | --- | --- | --- |
| **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. |