

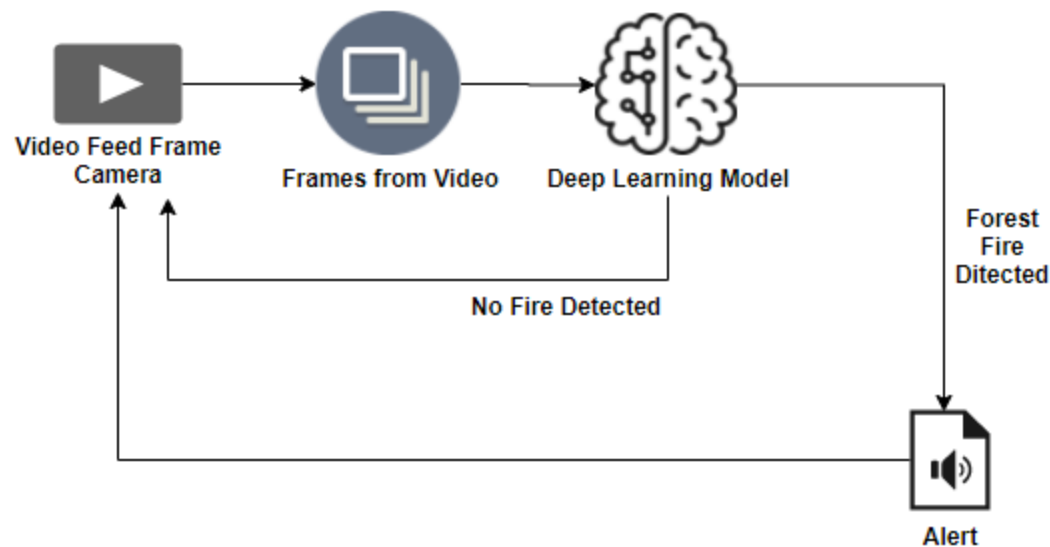
Project Design Phase-II Technology Stack (Architecture & Stack)

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| Date | 13 October 2022 |
| Team ID | PNT2022TMID39062 |
| Project Name | Project – Emerging methods for early detection of forest fires |

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Example: Order processing during pandemics for offline mode



Guidelines:

1. Include all the processes (As an application logic / Technology Block)
2. Provide infrastructural demarcation (Local / Cloud)
3. Indicate external interfaces (third party API's etc.)
4. Indicate Data Storage components / services
5. Indicate interface to machine learning models (if applicable)

Table-1 : Components & Technologies:

| | Description | Latency | Data Enrichment | Rate | Window Type | Window Size |
|---|---|---------|-----------------|------|-------------|-------------|
| 1 | data enrichment requirement | - | High | Low | Sliding | Large |
| 2 | data enrichment requirement | - | High | High | Sliding | Large |
| 3 | Latency requirement | Low | - | Low | Tumbling | Small |
| 4 | Latency requirement | Low | - | High | Tumbling | Small |
| 5 | latency requirement and And enrichment have the Same priority | Medium | Medium | High | Session | Large |

Table-2: Application Characteristics:

| S.No | Characteristics | Description | Technology |
|------|--------------------------|---|---|
| 1. | Open-Source Frameworks | List the open-source frameworks used | Technology of Opensource framework |
| 2. | Security Implementations | List all the security / access controls implemented, use of firewalls etc. | e.g. SHA-256, Encryptions, IAM Controls, OWASP etc. |
| 3. | Scalable Architecture | Justify the scalability of architecture (3 – tier, Micro-services) | Technology used |
| 4. | Availability | Justify the availability of application (e.g. use of load balancers, distributed servers etc.) | Technology used |
| 5. | Performance | Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc. | Technology used |

