**Project Design Phase-II**

**Proposed Solution Template**

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| Date | 1 November 2023 |
| Team ID | 592015 |
| Project Name | Eye disease detection using deep learning |
| Maximum Marks | 4Marks |

**Technical Architecture :**

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| --- | --- | --- |
| User interface | Integration | Backend |
| Development of model  User interface  User passes the image into the UI | User interface integration (HTML,CSS,java script)  Creating flask app using python  Import the saved model | Start  Dataset  Image Authentication  Model training using CNN  Saving the model |

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| **S.No** | **Component** | **Description** | **Technology** |
| 1. | User Interface | How user interacts with application e.g.  Web UI | HTML, CSS, JavaScript / Angular Js /  React Js etc. |
| 2. | Application Logic-1 | Logic for a process in the application | Java / Python |
| 3. | Database | Collect the Dataset Based on the Problem  Statement | File Manager, MySQL, NoSQL, etc. |
| 4. | File Storage/ Data | File storage requirements for Storing the dataset | Local System, Google Drive Etc |
| 5. | Frame Work | Used to Create a web Application, Integrating  Frontend and Back End | Python Flask, Django etc |
| 6. | Deep Learning Model | Purpose of Model | CNN, Transfer Learning etc. |
| 7. | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud Local Server Configuration:  Cloud Server Configuration : | Local, Cloud Foundry, Kubernetes, etc. |

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| **S.No** | **Characteristics** | **Description** | **Technology** |
| 1. | Open-Source Frameworks | List the open-source frameworks used | Python’s Flask |
| 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 |

Table-2 Application Characteristics:

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| --- | --- | --- | --- |
| **S.No** | **Characteristics** | **Description** | **Technology** |
| 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 |

Start