

Project Initialization and Planning Phase

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| Date | 10 July 2024 |
| Team ID | XXXXXXXXXX |
| Project Title | Detection of Autistic Spectrum Disorder: Classification |
| Maximum Marks | 3 Marks |

Project Proposal (Proposed Solution) template

This project proposal outlines a solution to address a specific problem. With a clear objective, defined scope Objective, and a concise problem statement, the proposed solution details the approach, key features, and resource requirements, including hardware, software, and personnel.

| Project Overview | |
|-------------------|---|
| objective | The primary objective of this project is to develop and deploy a robust classification model that accurately predicts whether an individual has Autistic Spectrum Disorder (ASD) based on relevant features and data. Specifically, the project aims |
| Scope | The scope of the project involves developing and deploying a classification model to detect Autistic Spectrum Disorder (ASD) based on comprehensive data analysis. This includes collecting and preparing relevant datasets, performing exploratory data analysis (EDA), selecting and training suitable machine learning models, and evaluating their performance. |
| Problem Statement | |
| Description | The project aims to develop a sophisticated classification system capable of accurately identifying individuals with Autistic Spectrum Disorder (ASD) using machine learning techniques. The process begins with the collection of diverse datasets containing crucial features such as behavioral traits, medical history, and responses to standardized diagnostic tools like the Autism Diagnostic Observation Schedule (ADOS) |
| Impact | Enable early diagnosis and intervention, improving outcomes for individuals with ASD. <input type="checkbox"/> <input type="checkbox"/> Optimize resource allocation in healthcare and advance research |

| Proposed Solution | |
|-------------------|---|
| Approach | Collecting and cleaning data on ASD-related features |
| Key Features | The proposed solution for detecting Autistic Spectrum Disorder (ASD) leverages a comprehensive approach integrating diverse data facets crucial for accurate classification |

Resource Requirements

| Resource Type | Description | Specification/Allocation |
|-------------------------|---|-------------------------------------|
| Hardware | | |
| Computing Resources | CPU/GPU specifications, number of cores | e.g., 2 x NVIDIA V100 GPUs |
| Memory | RAM specifications | e.g., 8 GB |
| Storage | Disk space for data, models, and logs | e.g., 1 TB SSD |
| Software | | |
| Frameworks | Python frameworks | e.g., Flask |
| Libraries | Additional libraries | e.g., scikit-learn, pandas, numpy |
| Development Environment | IDE, version control | e.g., Jupyter Notebook, Git |
| Data | | |
| Data | Source, size, format | e.g., Kaggle dataset, 10,000 images |