

## Project Initialization and Planning Phase

Date	10 July 2024
Team ID	SWTID1720426301
Project Title	Cognitive Care: Early Intervention for Alzheimer's Disease
Maximum Marks	3 Marks

### Project Proposal :

Alzheimer's Disease (AD) is a progressive neurodegenerative disorder characterized by cognitive decline, memory loss, and functional impairments. Early intervention has the potential to significantly delay the progression of AD, preserving cognitive function and improving quality of life. This project, Cognitive Care: Early Intervention for Alzheimer's Disease, aims to develop comprehensive strategies to promote early diagnosis and intervention, leveraging technology, education, and personalized care plans.

Project Overview	
Objectives	Early Diagnosis, Awareness, Personalized Care Plans, Support Services, Monitoring and Feedback
Scope	The project focuses on developing online tools, educational materials, and personalized care plans for early Alzheimer's intervention, excluding direct medical treatment and in-person services.
Problem Statement	
Description	The project addresses the lack of early detection and personalized intervention for Alzheimer's Disease to improve patient outcomes and quality of life.
Impact	Solving the problem could significantly delay disease progression, preserve cognitive function, and enhance overall quality of life for individuals affected by Alzheimer's Disease.
Proposed Solution	
Approach	Utilize agile development methodologies for iterative refinement of

	online tools, educational materials, care plans, support service integration, and monitoring systems in collaboration with stakeholders and healthcare experts.
Key Features	The proposed solution uniquely integrates advanced technology with personalized care plans and community engagement to enhance early intervention and support for Alzheimer's Disease.

## Resource Requirements

Resource Type	Description	Specification/Allocation
<b>Hardware</b>		
Computing Resources	CPU/GPU specifications, number of cores	T4 GPU
Memory	RAM specifications	16 GB
Storage	Disk space for data, models, and logs	512 GB SSD
<b>Software</b>		
Frameworks	Python frameworks	Flask, Django, Pandas, numpy,
Libraries	Additional libraries	Tensorflow, Scikit-learn
Development Environment	IDE, version control	Jupyter Notebook, Git, Google Collab, Spyder
<b>Data</b>		
Data	Source, size, format	Kaggle dataset, 6400 images