LexiEaseAI - *An AI Powered Dyslexic Support System*

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Problem Statement

Dyslexia is a common learning difficulty affecting individuals' ability to read, write, and spell, often leading to challenges in education, employment, and daily life.

Existing solutions often lack adaptability to varying levels of dyslexia severity, fail to provide real-time assistance, and personalized support system.

This gap hinders the ability of dyslexic individuals to fully engage in academic and professional environments, impacting their confidence and overall quality of life.

Why Did We Choose This Problem Statement

The objective of this project is to develop an AI-powered support system that assists dyslexic individuals in improving their reading, writing, and comprehension skills.

Leveraging NLP, speech recognition, and text-to-speech technologies, the system will offer real-time, personalized assistance to make written content more accessible and improve the learning experience.

The goal is to empower dyslexic users to engage with text more effectively, boost their academic performance, and build confidence in their language abilities.

Our Solution

Three Dyslexic Tests

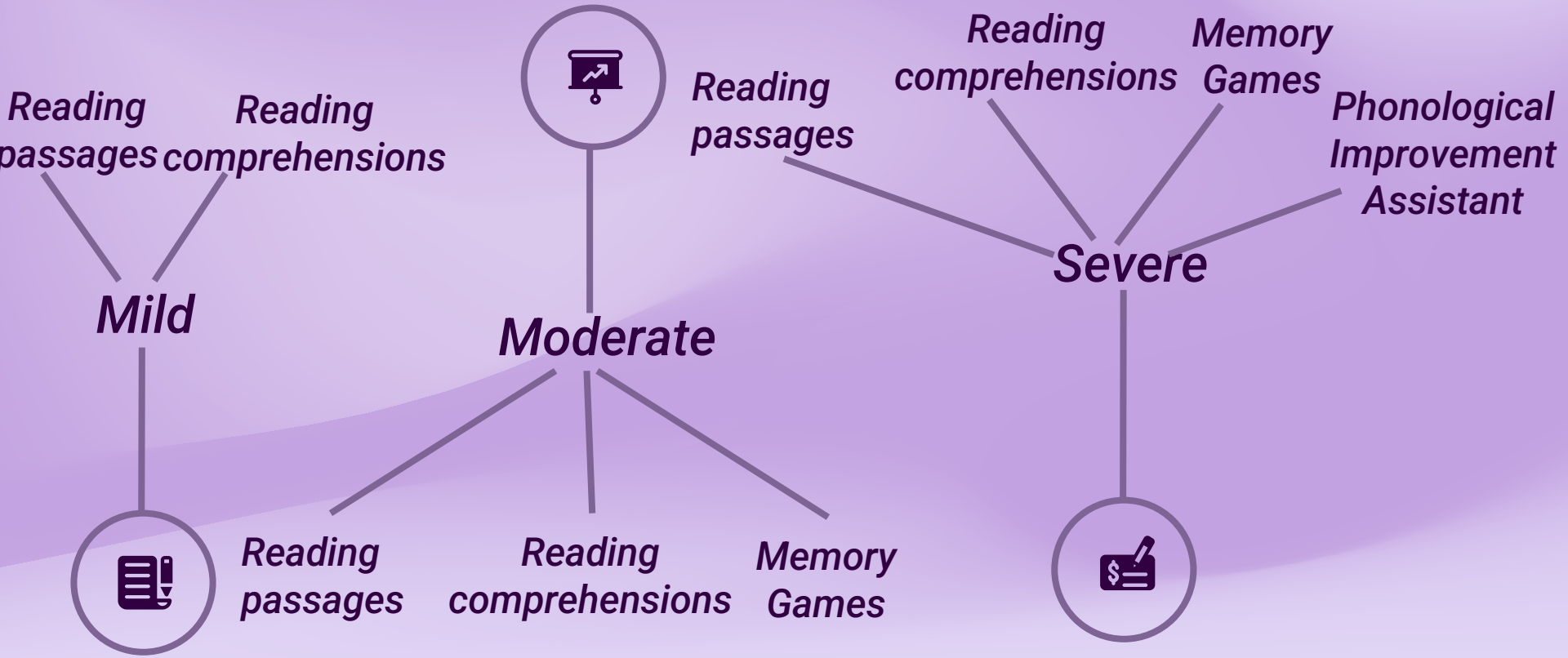
Phonological Awareness Test

Kauffman Assessment Battery Test

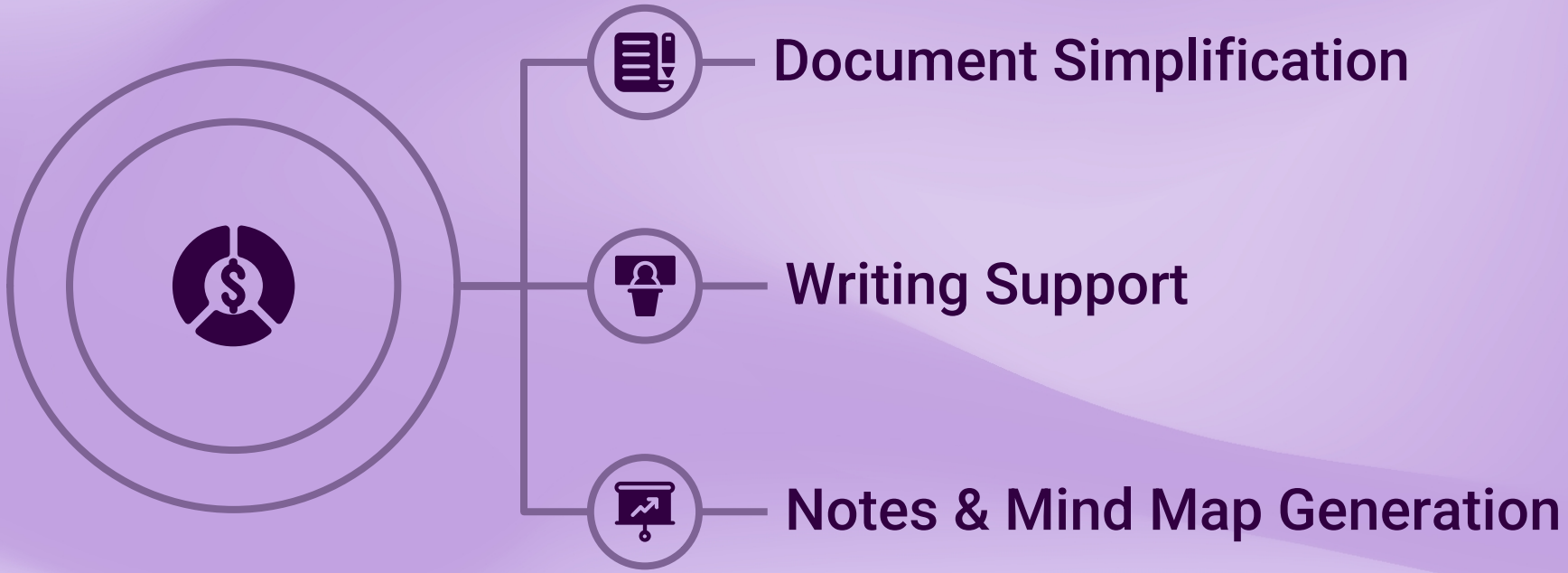
Gray Oral Reading Test

Our Solution

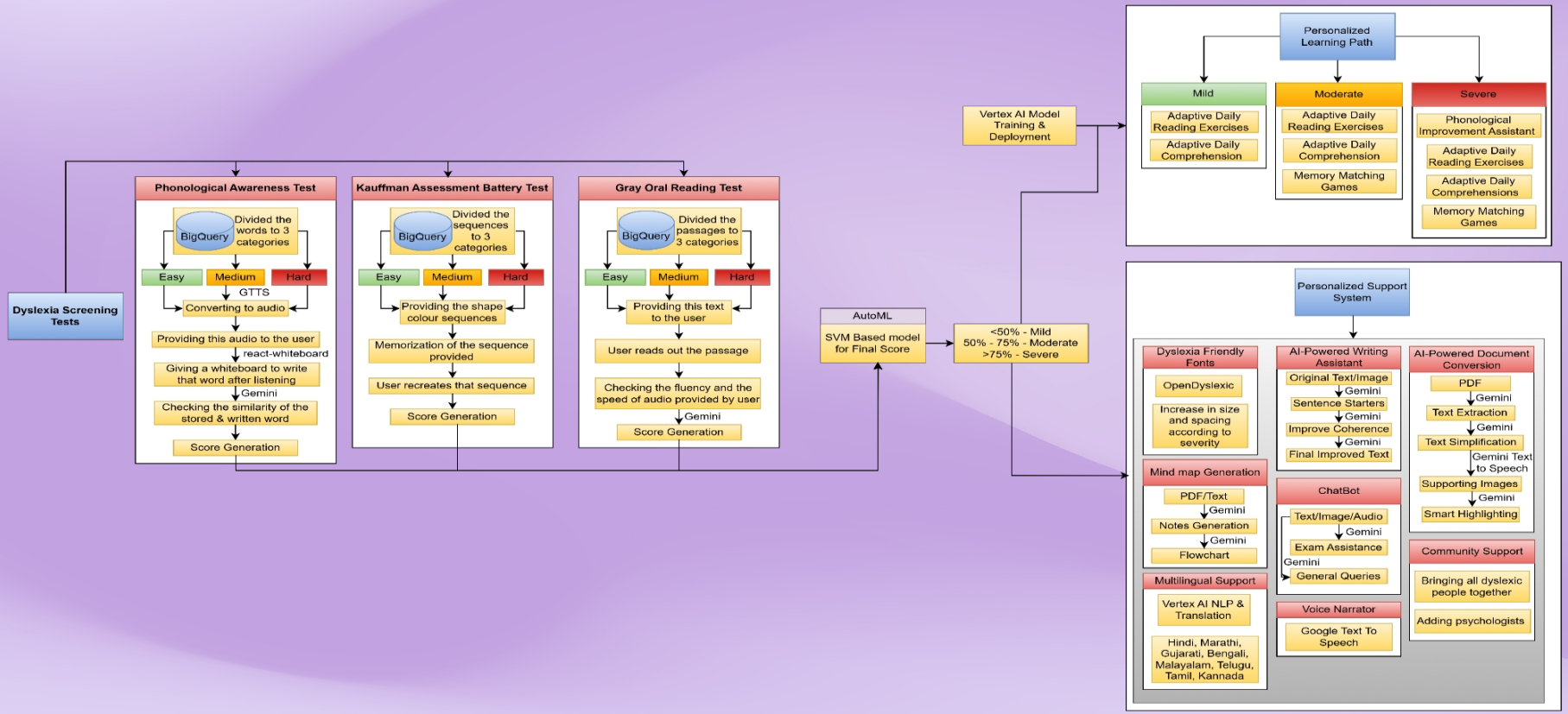
Personalized Learning Paths



Our Solution



SYSTEM ARCHITECTURE



How Did We Use Vultr’s Infrastructure

Vultr Services	How did we use them?
Vultr Compute Instance	Deployed the Frontend & Backend on Vultr Compute Instances
Vultr Block Storage	Utilized Vultr Block Storage to store files and images.
Vultr Managed SQL Database	Utilized Vultr Managed SQL Database to act as the primary database for the entire website.

Future Scope

Making the entire solution multilingual to make it more accessible for people fluent in other languages.

Increase the database of the dyslexia screening tests as well as the games to make it more extensive.

Thanks!