

# Technical Specifications

Hyundai Samarth Pledge Portal

2024

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## OVERVIEW

This document outlines the technical specifications requirement for the development of the Hyundai Samarth Pledge Portal for HMIL.

## SERVER SPECIFICATIONS

### UAT SERVER

Server type	Server configuration
AWS t2.small	vCPU - 1
	Memory (GiB) – 2gb
	Disk space – 20gb

### PROD SERVER

Server type	Server configuration
AWS m5.large	vCPU - 2
	Memory (GiB) – 8gb
	Disk space – 50gb

## DATABASE SPECIFICATIONS

**RDS MySQL will be used for database management**

### UAT DATABASE

Database type	Configuration
Db.m5d.large	vCPU - 2
	RAM – 8gb
	Disk space – 20gb

### PROD DATABASE

Database type	Configuration
Db.r6gd.large	vCPU - 2
	RAM – 16gb
	Disk space – 50gb

**Availability Zones: a - z**

## DEPLOYMENT SPECIFICATIONS

### FRONTEND

Type	Purpose
<b>S3 Bucket</b>	Will be used to store certificates and static images
<b>EC2 server</b>	<p><b>Next.js</b> - EC2 server will host the frontend application, positioned behind CloudFront for enhanced performance and security.</p> <p><b>React</b> - EC2 server will not be required. Code will be deployed on S3.</p>
<b>AWS Cognito User</b>	To facilitate access to the S3 bucket for uploading certificates from the frontend application.

### BACKEND

Type	Purpose
<b>EC2 Auto Scaling Group</b>	<p>To be configured with a minimum of two server and a maximum of five servers, managed through an <b>Application Load Balancer</b> for scalability and reliability.</p> <p><b>Autoscaling Group Settings</b></p> <ul style="list-style-type: none"> <li>• <b>Scale Out</b> Add an instance when: CPU utilization &gt; 70% for 5 minutes</li> <li>• <b>Scale In</b> Remove an instance when: CPU utilization &lt; 30% for 5 minutes</li> </ul>