**Quizify – API Testing Project using Postman**

**Project Description**

This project involved performing **API Testing** on the **Quizify Online Quiz and Certification System**, a live MERN-stack application that provides quiz functionalities, result tracking, and admin management. The goal of this testing project was to validate all backend **RESTful APIs** for correctness, security, and performance using the industry-standard tool, **Postman**.

**Objective**

The key objectives for this project were to:

* **Validate** all CRUD (Create, Read, Update, Delete) operations for User, Quiz, Result, and Admin modules.
* **Ensure** authorization and authentication work properly with **JWT** (JSON Web Tokens).
* **Verify** both positive and negative API responses.
* **Automate** checks using Postman Test Scripts.
* **Generate** reports and document defects found.

**Tools Used**

* **Postman:** For API request testing and scripting
* **MongoDB Atlas:** Backend database
* **Render:** Backend hosting
* **Vercel:** Frontend hosting
* **Excel / Google Sheets:** For Test Cases and Bug Reports

**Environment Details**

| **Field** | **Details** |
| --- | --- |
| **Base URL (Live Backend)** | https://quiziify-backend.onrender.com/api |
| **Frontend (Reference)** | https://quizify-phi.vercel.app |
| **Authentication** | **JWT token** is required for protected endpoints. Separate roles exist for user and admin. |

**Testing Modules**

| **Module** | **APIs Tested** | **Auth Required** |
| --- | --- | --- |
| **Authentication** | Register, Login, Reset Password | ❌ |
| **User Profile** | Get Profile, Update Profile | ✅ |
| **Quiz** | Get Quizzes, Get Questions | ✅ |
| **Results** | Submit, Leaderboard, History | ✅ |
| **Admin** | Users, Questions, Stats | ✅ (Admin Token) |