Google Cloud Service Recommendation Report

Recommended Service: Google Cloud Run

1. Executive Summary This report recommends Google Cloud Run for deploying your stateless web application. Cloud Run is a fully managed serverless platform that runs Docker containers, directly aligning with your technical and operational requirements. It is particularly well-suited for your goal of minimizing costs in a low-traffic environment.

2. Justification Our recommendation is based on a careful analysis of your specified needs:

- **For your Stateless Web Application**: Cloud Run is designed to run stateless containers, which makes it an ideal environment for your application. It ensures that incoming requests can be handled by any available container instance without relying on the state of a specific instance.
- **For Your Preference for Docker**: Because you prefer to use Docker, Cloud Run is a perfect fit. It is a container-native service that allows you to deploy any Docker image from container registries like Artifact Registry or Docker Hub.
- **For Your Desire for a Managed Service**: You asked for a managed service, and Cloud Run is a fully managed platform. This means Google handles all the underlying infrastructure, including server provisioning, scaling, patching, and security, allowing you to focus solely on your code.
- **For Your Goal to Minimize Cost with Low Traffic**: Your primary objective is to minimize costs with low traffic. Cloud Run's "scale-to-zero" feature is the key to achieving this. When your application is not receiving any requests, Cloud Run automatically scales down to zero instances, and you pay nothing for compute. This is the most cost-efficient approach for services with low or intermittent usage.

3. Conclusion Google Cloud Run is the optimal choice for your project because it directly matches your requirements for a stateless, containerized, and fully managed service while offering a powerful cost-saving advantage for low-traffic applications through its scale-to-zero capability.