Capstone Project

You work as a Cloud Engineer in XYZ corporation. The company has recently set up a new cloud team, and wants them to work on the company's Google Cloud Console. The company's resources are deployed in a project called "sample company".

There are three roles in the team:

- Admins - owner access
- Workers - edit access for VMs
- QA - viewer access for VMs

Create three users for the same.

There is a separate project QA where a storage server is running.

In the current architecture, the company is running a single server which is high in config for their application needs. You have been hired to make the architecture more resilient and cost effective. For implementing the same, following are the changes that you suggested:

1. Deploy the application on app service which can be scaled up and down from 2 instances to 10 instances. Use apache tools for this for creating traffic for the server.
2. A storage server was deployed in a different project. You have to ensure the app service is able to talk to that server. To ensure this, deploy a server in the same VPC as of app service, and check if you are able to ping storage VM in another project.
3. The app service will be interacting with a database. For now, the database exists in a local system. Here is the exported database. Use this and import in Cloud SQL.
4. The company wants to review different versions of the code on the app service. Explain the mechanism using screenshots.
5. Configure Stackdriver monitoring to monitor the storage server. An email should be triggered to the owner of the project in case this server goes down.

The above architecture and requirements have to be shown to the stakeholders using a proof of concept. Please implement the project and submit screenshots to the support team.

