

### Exercise-1337:

1. Team Snake is working on a new project that serves payment services globally. They have the following services to be deployed:
  - a) Web server
  - b) External API Service
  - c) Internal API Service
  - d) Payment Processor Integration Service
  - e) Redis Cache
  - f) Relational Database

Please provide a network architecture diagram, as well as suitable solutions that considers Security, High Availability / Reliability, Scalability, Performance and Observability.

2. You have been tasked to complete the following task:
  - a) Setup a private Docker Registry, which has its storage on AWS S3 (<https://docs.docker.com/registry/deploying/>)
  - b) Deploy *yeasy/simple-web* - a simple web application by using Docker container with the private Docker Registry. (<https://hub.docker.com/r/yeasy/simple-web/>)
  - c) Setup a reverse-proxy using Nginx in front of one *yeasy/simple-web* container
  - d) [Bonus] Setup a load balancer using Nginx with *yeasy/simple-web* as its web application



Please save your answers in the following format, and send it back to us.

- Codes: Zip or provide a Github link
- Screenshots of the Results
- Setup Guide

Feel free to reply to us if you have any questions. Thank you.