Problem

XYZ Corp has a B2B SAS app that is in production. As part of rolling out a new feature the application must be integrated with a third-party exchange for corporate buyers. The integration steps and baseline code are available as a public GitHub repository.

The companies that integrate with the buyer exchange can fork or clone the repository, add and make code changes as needed for their specific integration and run the service on any Java application server.

The Java code base needs to be managed in XYZ Corp's existing, internal Git installation and Jenkins jobs must be setup for building, testing and deploying the integration service.

Deliverables

- A diagram of the CI/CD pipeline from your design (hand-drawn is OK) indicating all the components, starting from Git through production environment, and workflows.
- A design document that describes how you would you implement the following in the pipeline (following are only guidelines, you are free to make assumptions to make your design coherent and realistic):
 - How could the public, baseline repository published by the exchange be made available to developers.
 - How would the third-party components in the baseline code be checked for security vulnerabilities.
 - How would the integration code be maintained.
 - How would the Java code be built and unit-tested.
 - How would the built-artifacts be managed.
 - How would automated integration tests be performed on built artifacts.
 - How would the builds be promoted to release candidates and how the latter be managed.
 - How is deployment orchestrated from Jenkins. You can plan to use supporting tools also.