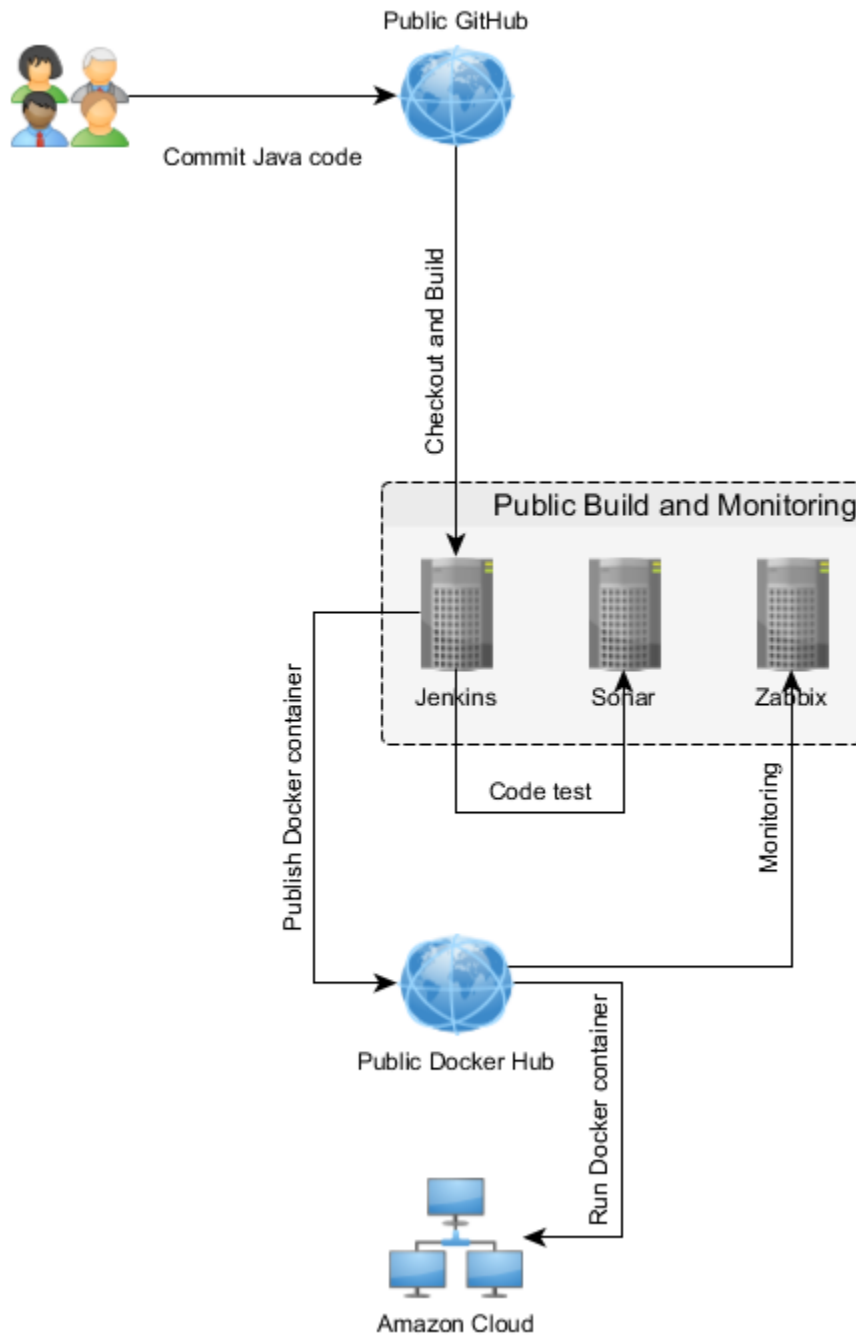# Deployment architecture

Here is the proposed schema for this solution.

Workflow:

1. Developers commit code to the public GitHub repo.
2. Jenkins: check out this code, build it, run unit tests.
3. Sonar: check the code for quality, detect coverage percentage, etc.
4. If all tests passed, Jenkins build Docker image and push it to the public Docker Hub
5. Amazon Cloud: pull the image from the Hub and run it.
6. Application: send monitoring data to Zabbix server to collect statistics, fire alarms, provide graphs, etc.

Hardware requirements:

	CPU	RAM	Storage
CI/Monitoring infrastructure			
Jenkins	2	4	20
Sonar	1	2	10
Zabbix	1	2	10
Amazon Cloud infrastructure			
2 x App servers	2	4	10
PostgreSQL	2	4	10
ElasticSearch	2	4	20
Load Balancer	As a Service		

CI/Monitoring infrastructure should be accessible from the Internet so we have two options to implement it, which should be decided by our IT team:

1. Build it in our data center, provide public access
2. Build it in Amazon cloud