1. Workflow:

IDE: sublime text / vim

Language: python, Javascript

Testing: Eslint

Local Server: Docker

Style: Google Style Guide

Team: Github

Database: Mysql

Typical development cycle starts with modification on local repository. After testing on local repository, build a new docker image, deploy the change and test that in the test traffic. After tested on the test traffic, put that docker image in the production.

2. How to install:

This is a how-to-install guide on linux. This is subject to change based on which cloud service we will use.

Install Docker: https://docs.docker.com/engine/installation/linux/ubuntu/

Install Github: https://www.howtoforge.com/tutorial/install-git-and-github-on-ubuntu-14.04/

Install Eslint: https://www.npmjs.com/package/eslint (dependency: node, npm)

Install sublime: https://community.linuxmint.com/tutorial/view/907

Install miniKube: https://kubernetes.io/docs/tutorials/stateless-application/hello-minikube/#create-a-docker-container-image

Set up docker:

1) Create Dockerfile: (Start from other images are fine too)

From debian:latest

RUN apt-get update

RUN apt-get -y install git

RUN apt-get -y install node

(clone code from git repo/mount local dev repo)

2) Run command: docker build –t <docker_image> .

Other libraries such as https://github.com/skadistats/clarity.git might be installed depending on the budget we have.

3. Productivity benefits:

The main productivity benefit is that it is easy to adjust the number of nodes depending on the load requirement. It is also relatively easy to setup to generate a proof of concept.