- **Blue Ocean** : Blue Ocean rethinks the user experience of Jenkins. Designed from the ground up for Jenkins pipeline , but still compatible with freestyle jobs, Blue Ocean reduces clutter and increases clarity for every member of the team.
  - **Installing :**
    - Go to *Manage Jenkins* .
    - Then go to *Manage Plug-ins*.
    - Select the *Available* tab and add "Blue Ocean" in the filter box to search for the plugin.
    - Select the *Blue Ocean*.
    - Install and restart the jenkins.
    - Open Blue Ocean UI by clicking *Blue Ocean* option.
- **Creating Private GitHub Repository:**
  - create a new freestyle project.
  - Under the *Source Code Management* , choose *Git* option
  - Create a private repository.
  - Paste the private repository URL in the given field.
  - Since the repository is private, credentials for Jenkins needs to be added.
  - Click on *Add* button, choose Jenkins as the Credential provider.
  - Enter your GitHub user-name and password.Add the credentials .
  - Then choose the *added credentials* in the dropdown menu that appears next to Credentials label.
  - Now Jenkins can access the private Repository.
- **Configuring the GitSCM Poll Build Trigger** :
  - choose *GitHub hook trigger for GITScm polling* option in *Build Trigger* section.
  - Now, you need to set up your GitHub repository to makes requests to Jenkins webhook and the polling logic can be completed.
  - Now goto github repository and then to *Settings.*
  - Select *Integrations & services* option .
  - Choose *Add Service* and select *Jenkins(GitHub plugin).*
  - To get the public URL, ngrok needs to be installed .
  - After installation ,run the command ./ngrok http 8080, this will provide a public ip address.
  - paste it into the *Jenkins Hook URL* text box.
  - Click on the Active check-box and click on *Add Service* button to activate the service.
- **Post Built Actions – Email Notification:**
  - **Configuring e-mail id:**
    - In the homepage of jenkins goto *Manage Jenkins*.

- ■ Go to Configure system and then goto E-mail Notification
- ■ Add the SMTP server details of the email which you want to use to send e-mails.
- ■ Select the Advanced option
- ■ Select Use SMTP Authentication
- ■ and enter account user-name and password.
- ■ Select Use SSL and provide SSL port number.
  - ○ **<u>Adding post build action :</u>**
    - ■ Go to Configuration page of project
    - ■ Click on Add post-build action and choose Email Notification from the dropdown menu.
    - ■ Enter the e-mail id's of the recipients in Recipients field.
    - ■ Apply and Save the changes.