Deploy ReactJS app to Azure Blob Storage through GitHub Actions
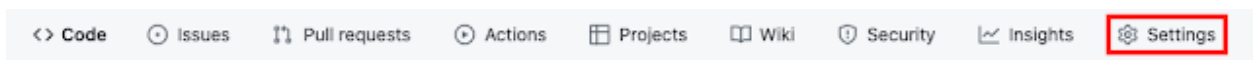
Pre-requisites:
- Azure subscription
- Git installed on your computer
- Github Account
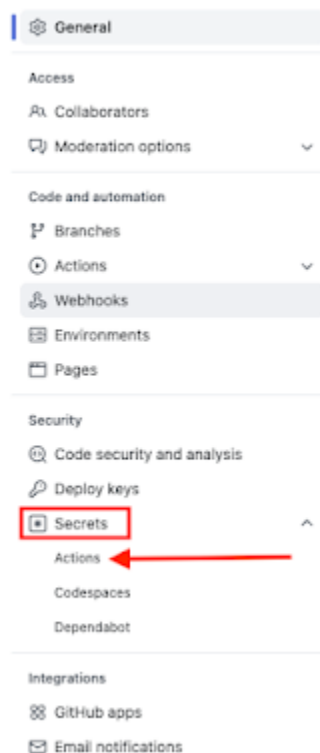- Azure storage account with static websites enabled

GitHub Actions

Add storage account connection string on github Action secrets.
In GitHub, click on Settings :

Click on Secrets followed by Actions:

Click on "New repository secret".

Actions secrets   New repository secret

Secrets are environment variables that are **encrypted**. Anyone with **collaborator** access to this repository can use these secrets for Actions.

Secrets are not passed to workflows that are triggered by a pull request from a fork. Learn more.

Create a key named *AZURE_STORAGE* then paste the connection string from the storage account that we have created for hosting Click on "Add secret".

Actions secrets / New secret

Name

AZURE_STORAGE

Value

DefaultEndpointsProtocol=https;AccountName=react2az;AccountKey=███████████
████████████████████████████████;EndpointSuffix=core.windows.net

Add secret

GitHub Workflows in Github Actions:

Add a folder *.github/workflows* to your source code. Inside that folder, create a text file named *deploytoserver.yml* (file name can be any meaningful name with .yml extension)with the following content:

```
name: Deploy React App to Azure Storage

on:
  push:
```

```yaml
      branches:
        - main
    pull_request:
      branches:
        - '*'
defaults:
  run:
    working-directory: ./
env:
  NODE_VERSION: '17'                  # set this to the node version to
use
  CI: false
jobs:
  build-and-deploy:
    name: Build and Deploy
    runs-on: ubuntu-latest
    steps:
    - uses: actions/checkout@v2
    - name: Use Node.js ${{ env.NODE_VERSION }}
      uses: actions/setup-node@v1
      with:
        node-version: ${{ env.NODE_VERSION }}
    - name: npm install & build
      run: |
        # Build and test the project, then
        # deploy to Azure Web App.
        npm install
        npm run build
    - name: 'Deploy react app to Azure blob storage'
      uses: bacongobbler/azure-blob-storage-upload@main
      with:
          source_dir: './build'
          container_name: '$web'
          connection_string: ${{ secrets.AZURE_STORAGE }}
          sync: 'true'
```

On every push and pull request to the main Branch the workflow automatically triggers and takes the build of the updated code and deploy on the Azure storage.

Once this file gets pushed or created on GitHub, you can see that the workflow gets kicked off. Click on *Actions* and you will see a workflow running.

If all goes well, the workflow will turn green, meaning that it completed successfully: