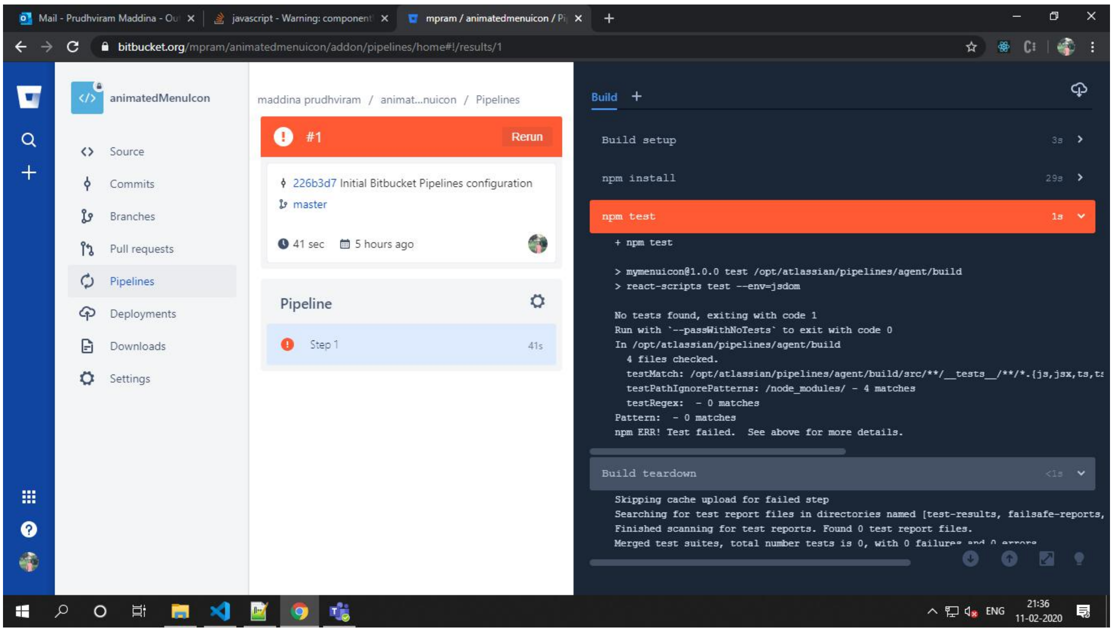
React Test-case for pipelines & bitbucket - github code sharing.

1. First uploaded a sample (https://codesandbox.io/s/mymenuicon-4nwjz) project into bitbucket and github separately.
2. After Uploading sample project, I ran pipeline test for the project in bitbucket.
3. Since it dont have any react- test cases it failed(ScreenShot -1), In npm install pipeline test there are few warnings that need to be fixed along with failed test case since the sample project dont have any react-test cases written.



Mail - Prudhviram Maddina - Ou
javascript - Warning: component
mpram / animatedmenuicon / Pi
bitbucket.org/mpram/animatedmenuicon/addon/pipelines/home#!/results/1
animatedMenuIcon
Source
Commits
Branches
Pull requests
Pipelines
Deployments
Downloads
Settings
maddina prudhviram / animat...nuicon / Pipelines
#1
Rerun
226b3d7 Initial Bitbucket Pipelines configuration
master
41 sec
5 hours ago
Pipeline
Step 1
41s
Build
Build setup 3s
npm install 29s
npm test 1s
Build teardown <1s
ENG
21:36
11-02-2020

```
+ npm test

> mymenuicon@1.0.0 test /opt/atlassian/pipelines/agent/build
> react-scripts test --env=jsdom

No tests found, exiting with code 1
Run with `--passWithNoTests` to exit with code 0
In /opt/atlassian/pipelines/agent/build
  4 files checked.
  testMatch: /opt/atlassian/pipelines/agent/build/src/**/__tests__/**/*.{js,jsx,ts,ts
  testPathIgnorePatterns: /node_modules/ - 4 matches
  testRegex:  - 0 matches
Pattern:  - 0 matches
npm ERR! Test failed.  See above for more details.
```

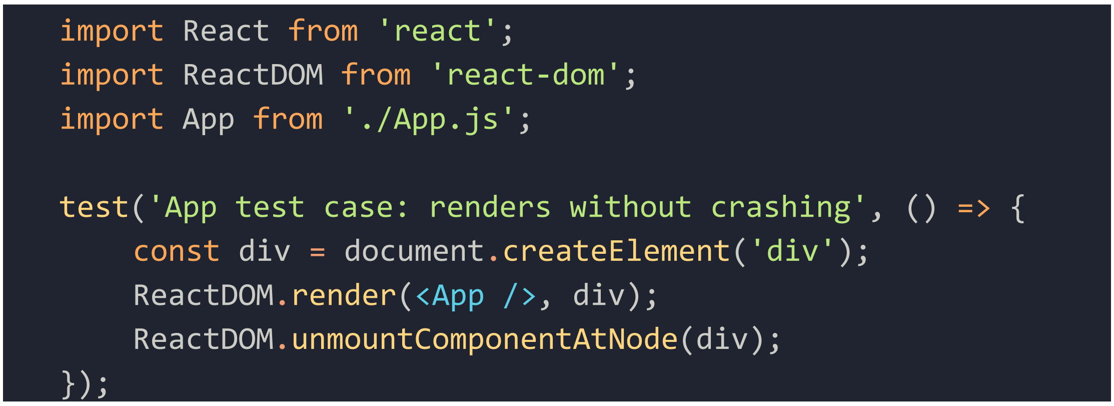
```
Skipping cache upload for failed step
Searching for test report files in directories named [test-results, failsafe-reports,
Finished scanning for test reports. Found 0 test report files.
Merged test suites, total number tests is 0, with 0 failures and 0 errors
```

4. For fixing warnings in npm install I ran ***npm audit fix*** command in source code path
5. For fixing react-test case I have installed jest@24.9.0 with `npm install --save-dev jest@24.9.0` in package.json, It will come by default if you run ***npx create-react-app command .***
6. After installing jest, we should create a sample mock test file with ***.test*** added to file for Example if file name is ***Index.js*** create mock for it like I***ndex.test.js*** and write mock cases in that.

7. Mock cases should be like but not limited to:

```
 test('object assignment', () => {
    const data = {one: 1};
    data['two'] = 2;
    expect(data).toEqual({one: 1, two: 2});
});
```

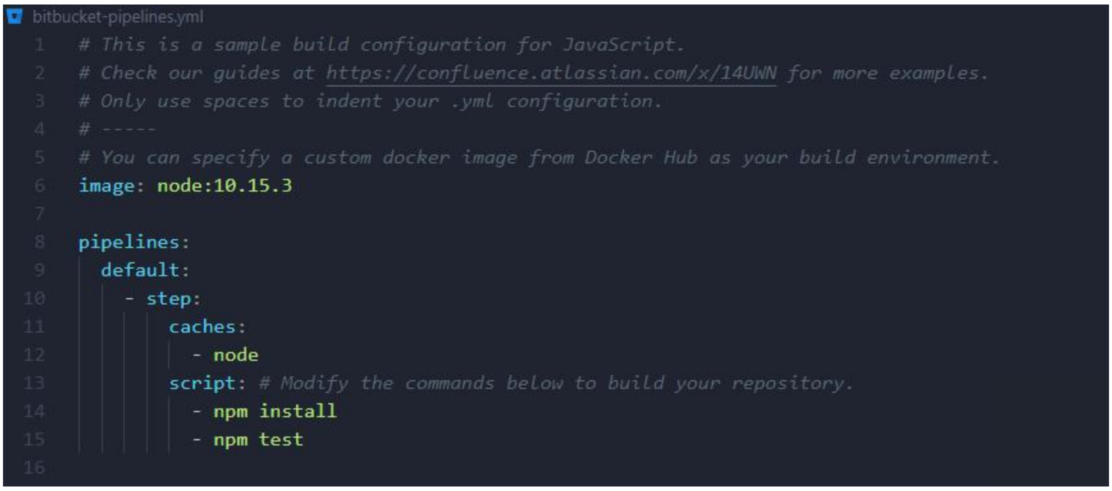
8. Usually test cases for whole app build test will be like:



```
import React from 'react';
import ReactDOM from 'react-dom';
import App from './App.js';

test('App test case: renders without crashing', () => {
    const div = document.createElement('div');
    ReactDOM.render(<App />, div);
    ReactDOM.unmountComponentAtNode(div);
});
```

9. For BitBucket pipeline test code bitbucket-pipeline.yaml file included and the

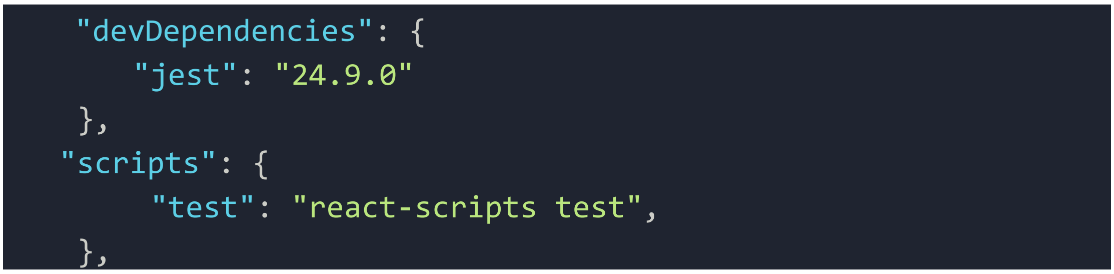
   code in bitbucket-pipeline.yaml file is(ss-2):



bitbucket-pipelines.yml

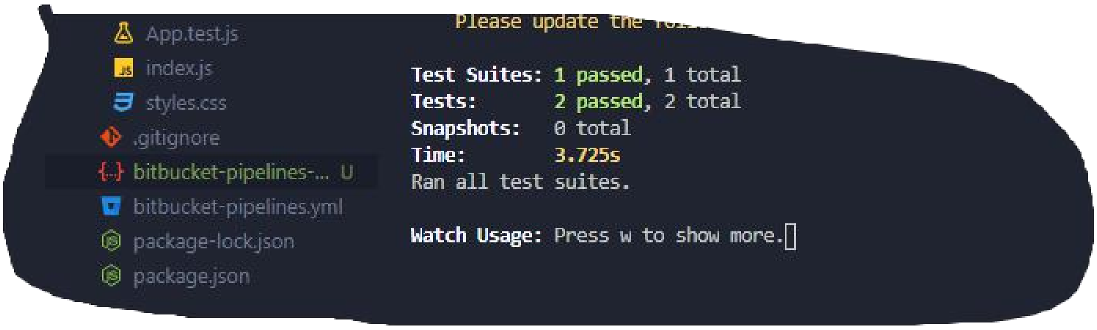
```
# This is a sample build configuration for JavaScript.
# Check our guides at https://confluence.atlassian.com/x/14UWN for more examples.
# Only use spaces to indent your .yml configuration.
# -----
# You can specify a custom docker image from Docker Hub as your build environment.
image: node:10.15.3

pipelines:
  default:
    - step:
        caches:
          - node
        script: # Modify the commands below to build your repository.
          - npm install
          - npm test

```

10. After testcases written, configure package.json with the following code & updated code with testcases and pipeline in sample repository in sandbox link. (https://codesandbox.io/s/github/maddinaprudhvi/animatedMenuIcon)



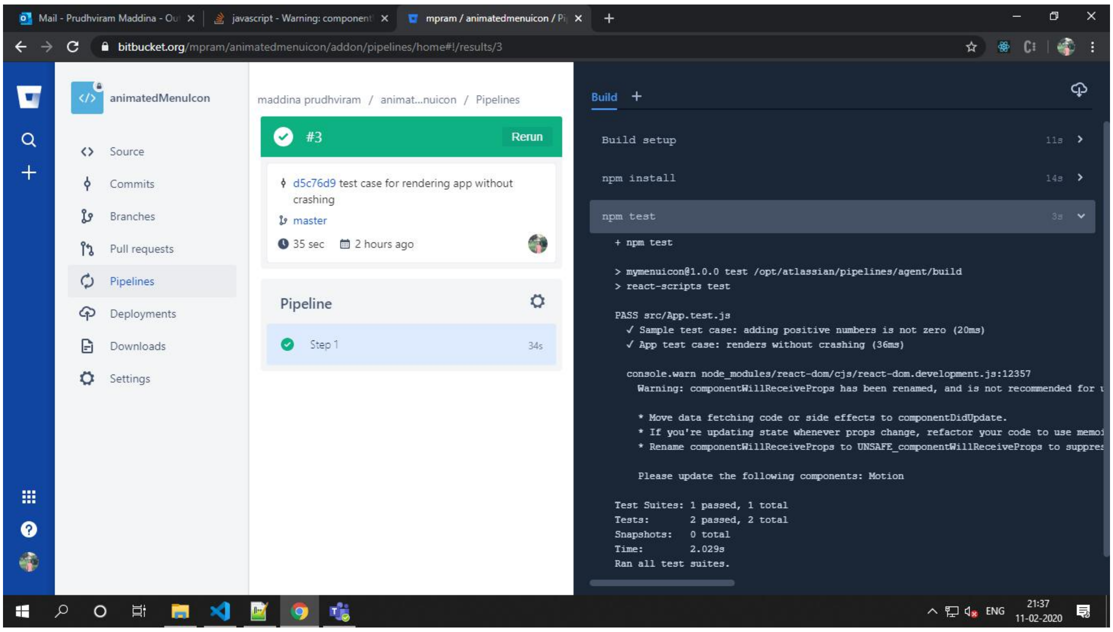
```
    "devDependencies": {
        "jest": "24.9.0"
    },
   "scripts": {
         "test": "react-scripts test",
    },
```

11. Run ***npm run test*** in terminal to see whether test cases failing or not, If passed you will get something like this in screen :



```
Please update the fol...

Test Suites: 1 passed, 1 total
Tests:       2 passed, 2 total
Snapshots:   0 total
Time:        3.725s
Ran all test suites.

Watch Usage: Press w to show more.
```

12. After tests are passed commit it to the repository and pipeline tests will be triggered each time you commit into repository .

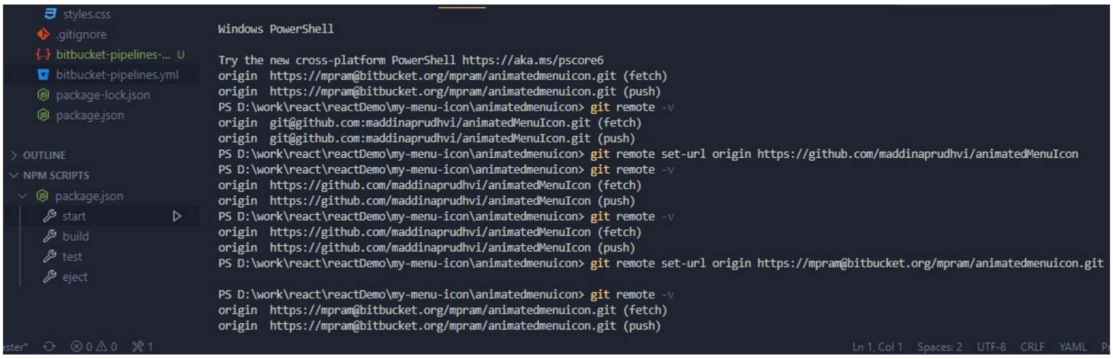


Mail - Prudhviram Maddina - Ou
javascript - Warning: component
mpram / animatedmenuicon / Pi
bitbucket.org/mpram/animatedmenuicon/addon/pipelines/home#!/results/3
animatedMenuIcon
Source
Commits
Branches
Pull requests
Pipelines
Deployments
Downloads
Settings
maddina prudhviram / animat...nuicon / Pipelines
#3
Rerun
master
35 sec
2 hours ago
Pipeline
Step 1
34s
Build
21:37
11-02-2020
ENG

d5c76d9 test case for rendering app without crashing

```
Build setup                                                     11s
npm install                                                     14s
npm test                                                         3s
  + npm test

  > mymenuicon@1.0.0 test /opt/atlassian/pipelines/agent/build
  > react-scripts test

  PASS src/App.test.js
    ✓ Sample test case: adding positive numbers is not zero (20ms)
    ✓ App test case: renders without crashing (36ms)

    console.warn node_modules/react-dom/cjs/react-dom.development.js:12357
      Warning: componentWillReceiveProps has been renamed, and is not recommended for u

      * Move data fetching code or side effects to componentDidUpdate.
      * If you're updating state whenever props change, refactor your code to use memoi
      * Rename componentWillReceiveProps to UNSAFE_componentWillReceiveProps to suppres

      Please update the following components: Motion

  Test Suites: 1 passed, 1 total
  Tests:       2 passed, 2 total
  Snapshots:   0 total
  Time:        2.029s
  Ran all test suites.
```

13. Now the code in BitBucket repository Is different from that of code in GitHub, Rather than adding repository manually there is something like ***git remote set-url origin <your Url>*** to change url of your working repository and ***git remote -v*** for checking current url origin and after shifting url pull and push, your code will be updated in GitHub too.Here ss of url shifting :



```
Windows PowerShell

Try the new cross-platform PowerShell https://aka.ms/pscore6
origin  https://mpram@bitbucket.org/mpram/animatedmenuicon.git (fetch)
origin  https://mpram@bitbucket.org/mpram/animatedmenuicon.git (push)
PS D:\work\react\reactDemo\my-menu-icon\animatedmenuicon> git remote -v
origin  git@github.com:maddinaprudhvi/animatedMenuIcon.git (fetch)
origin  git@github.com:maddinaprudhvi/animatedMenuIcon.git (push)
PS D:\work\react\reactDemo\my-menu-icon\animatedmenuicon> git remote set-url origin https://github.com/maddinaprudhvi/animatedMenuIcon
PS D:\work\react\reactDemo\my-menu-icon\animatedmenuicon> git remote -v
origin  https://github.com/maddinaprudhvi/animatedMenuIcon (fetch)
origin  https://github.com/maddinaprudhvi/animatedMenuIcon (push)
PS D:\work\react\reactDemo\my-menu-icon\animatedmenuicon> git remote -v
origin  https://github.com/maddinaprudhvi/animatedMenuIcon (fetch)
origin  https://github.com/maddinaprudhvi/animatedMenuIcon (push)
PS D:\work\react\reactDemo\my-menu-icon\animatedmenuicon> git remote set-url origin https://mpram@bitbucket.org/mpram/animatedmenuicon.git

PS D:\work\react\reactDemo\my-menu-icon\animatedmenuicon> git remote -v
origin  https://mpram@bitbucket.org/mpram/animatedmenuicon.git (fetch)
origin  https://mpram@bitbucket.org/mpram/animatedmenuicon.git (push)
```

14. Now code will be in sync with both GitHub and BitBucket and if you wish to remove your code from local use command like ***git remote rm <destination/path>*** and `git remote rm` does not delete the remote repository from the server. It simply removes the remote and its references from your local repository.