

ReadMe

1) Branch dfs and bfs

Repository: DhavalPatodiya / CSE-464-2023-dpatodiy (Private)

Navigation: Code, Issues, Pull requests (1), Actions, Projects, Wiki, Security, Insights, Settings

Search branches... Overview | Yours | Active | Stale | All branches | New branch

Default branch

Branch	Updated	Status	Default
main	Updated 19 minutes ago by Dhaval Patodiya	✓	Default

Your main branch isn't protected
Protect this branch from force pushing or deletion, or require status checks before merging. [Learn more](#) [Dismiss] [Protect this branch]

Your branches

Branch	Updated	Status	Commits	Actions
dfs	Updated 23 minutes ago by DhavalPatodiya	✓	3 1	#2 [Open] [Edit] [Delete]
bfs	Updated 5 days ago by DhavalPatodiya	✓	1 0	#1 [Merged] [Edit] [Delete]

Active branches

Branch	Updated	Status	Commits	Actions
dfs	Updated 23 minutes ago by DhavalPatodiya	✓	3 1	#2 [Open] [Edit] [Delete]
bfs	Updated 5 days ago by DhavalPatodiya	✓	1 0	#1 [Merged] [Edit] [Delete]

2) Merge conflict of branch dfs in main after merging main

- DFS commit for merge conflict: <https://github.com/DhavalPatodiya/CSE-464-2023-dpatodiy/commit/d9236e237d869801807f3d0f04bb010ce64f5103>

Open DhavalPatodiya wants to merge 2 commits into `main` from `dfs`

Conversation | Commits (2) | Checks (1) | Files changed (3) | +77 -0

DhavalPatodiya commented 29 minutes ago
No description provided.

DhavalPatodiya added 2 commits 32 minutes ago

- DFS ✓ 383fe14
- dfs algo ✓ d9236e2

Add more commits by pushing to the `dfs` branch on [DhavalPatodiya/CSE-464-2023-dpatodiy](#).

All checks have passed
1 successful check [Show all checks]

This branch has conflicts that must be resolved
Use the [web editor](#) or the [command line](#) to resolve conflicts. [Resolve conflicts]

Conflicting files

- src/main/java/GraphManager.java
- src/main/java/Path.java
- test/GraphManagerTest.java

Merge pull request [v] You can also [open this in GitHub Desktop](#) or view [command line instructions](#).

Reviewers
No reviews
Still in progress? [Learn about draft PRs](#)

Assignees
No one—assign yourself

Labels
None yet

Projects
None yet

Milestone
No milestone

Development
Successfully merging this pull request may close these issues.
None yet

Notifications
Customize
[Unsubscribe]
You're receiving notifications because you're watching this repository.

3) Merging BFS to Main before merging DFS.

- BFS commit of merge: <https://github.com/DhavalPatodiya/CSE-464-2023-dpatodiy/commit/33fed0162f675180bda398279f99597e392bc4fe>

Bfs #1

Merged

DhavalPatodiya merged 2 commits into `main` from `bfs` 18 minutes ago

Conversation 0

Commits 2

Checks 1

Files changed 5

+103 -11

DhavalPatodiya commented 18 minutes ago

- Merging bfs to main

DhavalPatodiya added 2 commits 5 days ago

BFS

Changing return type of API

DhavalPatodiya merged commit 6851f1c into main 18 minutes ago

1 check passed

View details

Revert

Pull request successfully merged and closed

You're all set—the `bfs` branch can be safely deleted.

Delete branch

Write

Preview

H B I ↵ > 🔗 ☰ ☷ @ ↶ ↷

Leave a comment

Reviewers

No reviews

Assignees

No one—assign yourself

Labels

None yet

Projects

None yet

Milestone

No milestone

Development

Successfully merging this pull request may close these issues.

None yet

Notifications

Customize

- 4) Github CI setup properly and successful runs:
- Commit id of first successful run : <https://github.com/DhavalPatodiya/CSE-464-2023-dpatodiy/commit/724819bdf576dc7b620c351d493587eaf0740e4f>
 - First failed run : <https://github.com/DhavalPatodiya/CSE-464-2023-dpatodiy/commit/d5714c3085fd200d805670916ce16c686817df48>

Conversation 0

Commits 3

Checks 1

Files changed 5

DhavalPatodiya commented 1 hour ago

No description provided.

DhavalPatodiya added 3 commits 1 hour ago

DFS ✓ 383fe14

dfs algo ✓ d9236e2

resolving conflicts ✓ de7f876

Add more commits by pushing to the `dfs` branch on [DhavalPatodiya/CSE-464-2023-dpatodiy](#).

Require approval from specific reviewers before merging

Branch protection rules ensure specific people approve pull requests before they're merged.

Add rule ×

✓ All checks have passed

1 successful check

Show all checks

✓ This branch has no conflicts with the base branch

Merging can be performed automatically.

Merge pull request

You can also [open this in GitHub Desktop](#) or view [command line instructions](#).

Reviews

No reviews

Still in progress? [Learn about draft PRs](#)

Assignees

No one—assign yourself

Labels

None yet

Projects

None yet

Milestone

No milestone

Development

Successfully merging this pull request may close these issues.

No yet

Notifications

Customize

Unsubscribe

You're receiving notifications because you're watching this repository.

- ## 5) Resolved Conflicts
- Commit id: <https://github.com/DhavalPatodiya/CSE-464-2023-dpatodiy/pull/2/commits/de7f8761a6fe6e84d39e3eee3c944a44b3affac1>

The screenshot shows a GitHub repository for 'DhavalPatodiya / CSE-464-2023-dpatodiy' with a private setting. The 'Actions' tab is selected, showing a workflow named 'Java CI' with a status of 'Merge pull request #1 from DhavalPatodiya/bfs #21'. The workflow run 'build' is shown as 'succeeded 20 minutes ago in 22s'. A sidebar on the left lists 'Summary', 'Jobs', 'Run details', 'Usage', and 'Workflow file'. The 'Jobs' section is expanded, showing a list of steps: 'Set up job' (1s), 'Run actions/checkout@v3' (1s), 'Set up JDK 20' (7s), 'Build with Maven' (12s), 'Post Set up JDK 20' (0s), 'Post Run actions/checkout@v3' (0s), and 'Complete job' (0s). The 'Build with Maven' step is highlighted.

Instructions and example code

I have written test cases providing the expected value and actual values explaining with comments. I am attaching the screenshot of test cases here providing detailed explanations:

- 1) BFS algo with path found:

```
13 // a-d path exists
14
15 @Test
16 public void bfsPathFound() throws Exception{
17     String expected = "a->b->c->d";
18     Path actual = g.graphSearch( src: "a", dst: "d", algo: "BFS");
19     Assert.assertTrue(expected.equals(actual.toString()));
20 }
```

- 2) BFS algo with path not found from node itself to node itself: As once we leave the node we can't reach it meaning there is no cycle from a to a.

```
//from a to a there is no path like a->b->a, there is no path to return to a once you leave a
@Test
public void bfsPathNotFound() throws Exception{
    Path actual = g.graphSearch( src: "a", dst: "a", algo: "BFS");
    Assert.assertNull(actual);
}
```

- 3) BFS algo When path doesn't exist as node f doesn't exist

```

3
7 // a-f path doesn't exists as f doesn't exists.
9 @Test
10 public void bfsPathNotFoundNode() throws Exception{
11     Path actual = g.graphSearch( src: "a", dst: "f", algo: "BFS");
12     Assert.assertNull(actual);
13 }

```

4) DFS algo with path exists between src and dst.

```

5 //b-e path exists
7 @Test
8 public void dfs() throws Exception{
9     String expected = "b->c->d->e";
10    Path actual = g.graphSearch( src: "b", dst: "e", algo: "DFS");
11    Assert.assertEquals(expected, actual.toString());
12 }

```

5) DFS algo with path not found from node itself to node itself: As once we leave the node we can't reach it meaning there is no cycle from a to a.

```

//from a to a there is no path like a->b->a. there is no path to return to a once you leave a
@Test
public void dfsPathNotFound() throws Exception{
    Path actual = g.graphSearch( src: "a", dst: "a", algo: "BFS");
    Assert.assertNull(actual);
}

```

6) DFS algo with node doesn't exists will return null. a-g path is not present as there is no node g.

```

// a-g path doesn't exists as f doesn't exists.
@Test
public void dfsPathNodeNotFound() throws Exception{
    Path actual = g.graphSearch( src: "a", dst: "g", algo: "BFS");
    Assert.assertNull(actual);
}

```

7) IllegalArgumentException thrown when algo is other than DFS or BFS.

```

//IllegalArgumentException thrown when algo is other than enum
@Test(expected= IllegalArgumentException.class)
public void invalidEnumName() throws Exception{
    System.out.println(g.graphSearch( src: "b", dst: "e", algo: "DMS"));
}

```

8) NullPointerException thrown when algo is null.

```
73
74 //NullPointerException thrown when algo is null
75 @Test(expected= NullPointerException.class)
76 public void algoNameIsNull() throws Exception{
77     System.out.println(g.graphSearch( src: "b", dst: "e", algo: null));
78 }
79
```