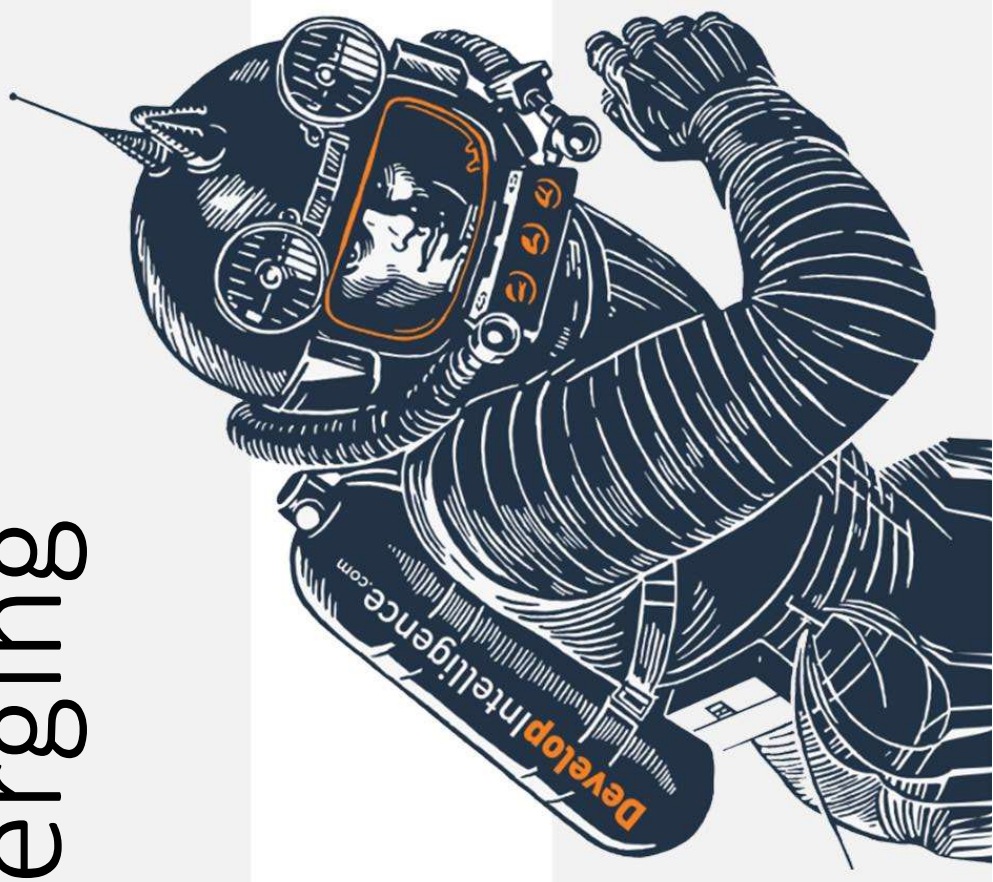


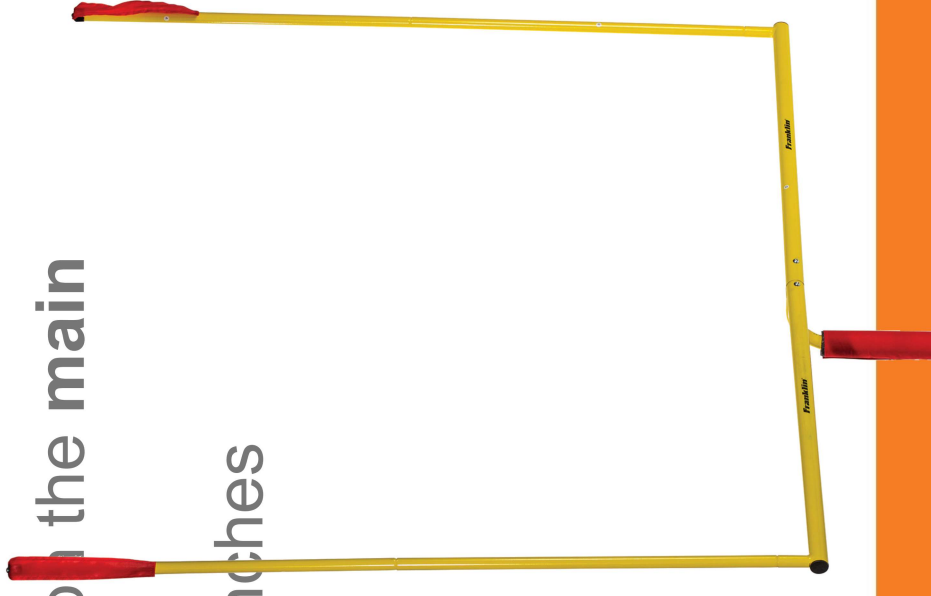
Branching and Merging





Goals

1. Explain why it's a bad idea to work directly on the **main** branch
2. Name the command to switch between branches

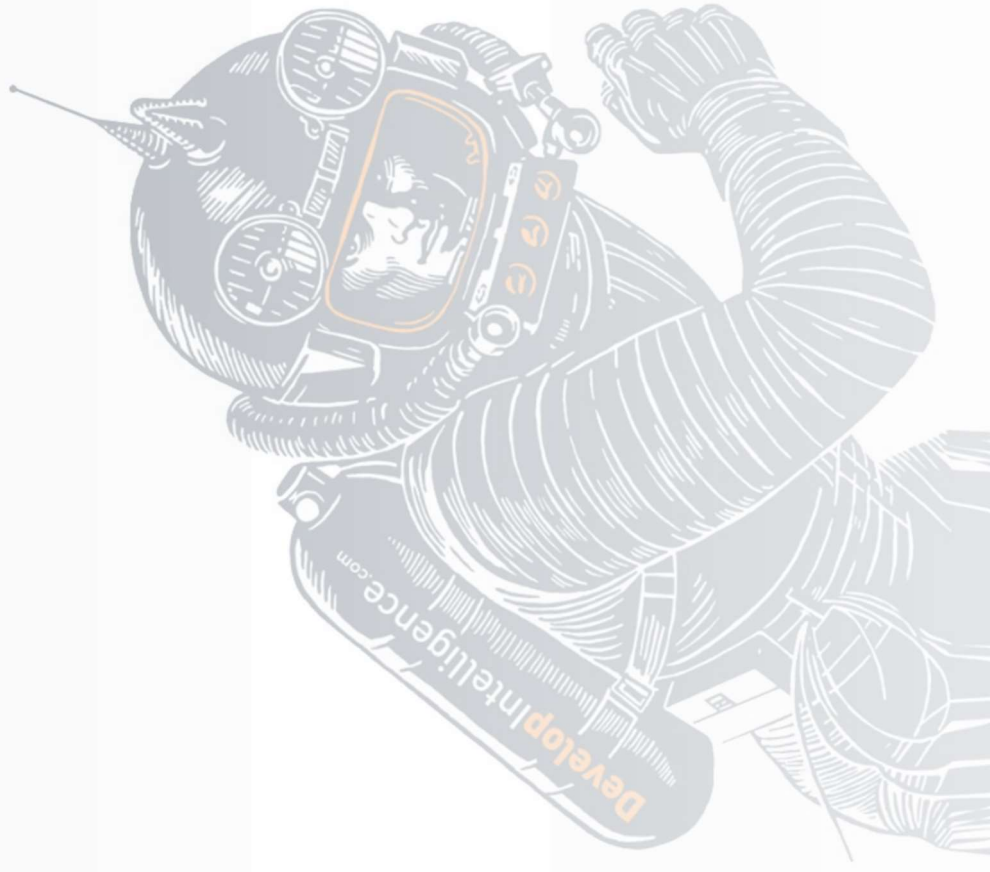




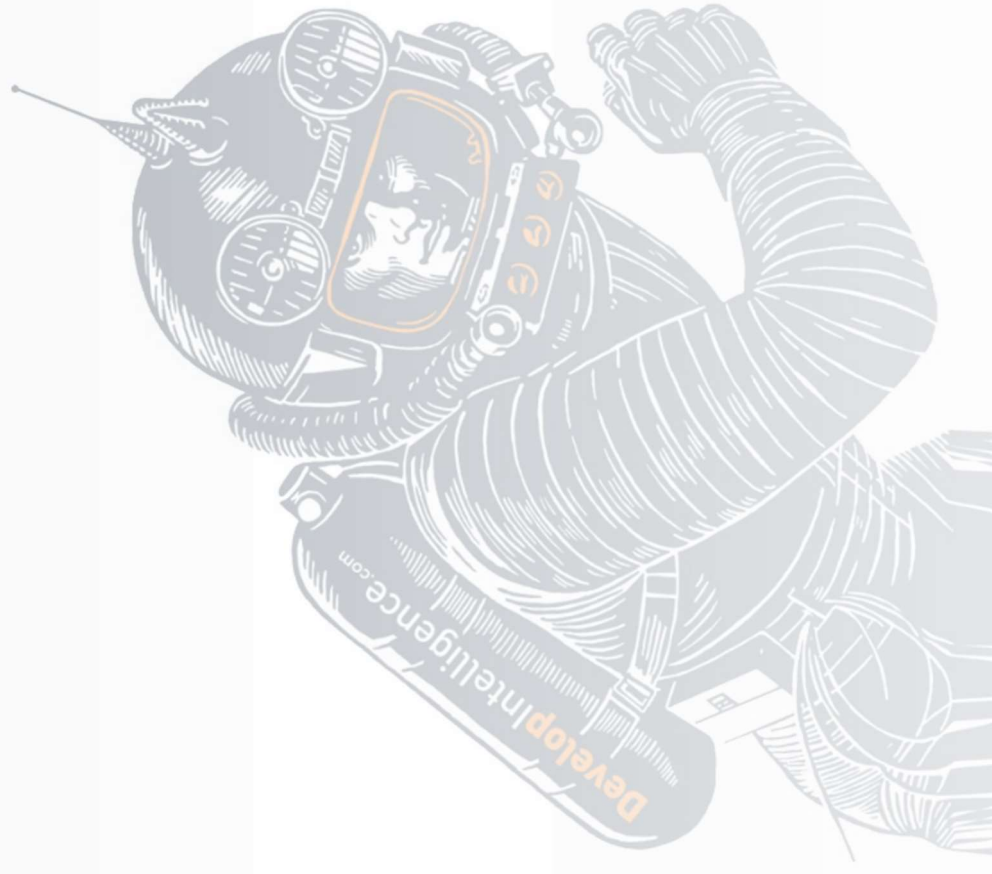
Roadmap

1. Branching
2. Merging





Branching





Branch Defined



Develop
Intelligence

*In Git, **branches** are a part of your everyday development process. Git branches are effectively a pointer to a snapshot of your changes. When you want to add a new feature or fix a bug—no matter how big or how small—you spawn a new branch to encapsulate your changes. This makes it harder for unstable code to get merged into the main code base, and it gives you the chance to clean up your future's history before merging it into the main branch.*



Takeaway

- Don't work on a shared branch
 - e.g. master, main, or develop
- Instead, create a feature branch specifically for each new functionality or bug fix
- Name it after the JIRA ticket
- When it's ready, submit a pull request to have someone else merge in the changes



- Git has lots of ways to do the same thing
- Create a new branch and switch:

```
1 | git checkout -b some-new-branch
```

- List available branches:

```
1 | git branch
```

- Switch back to main:

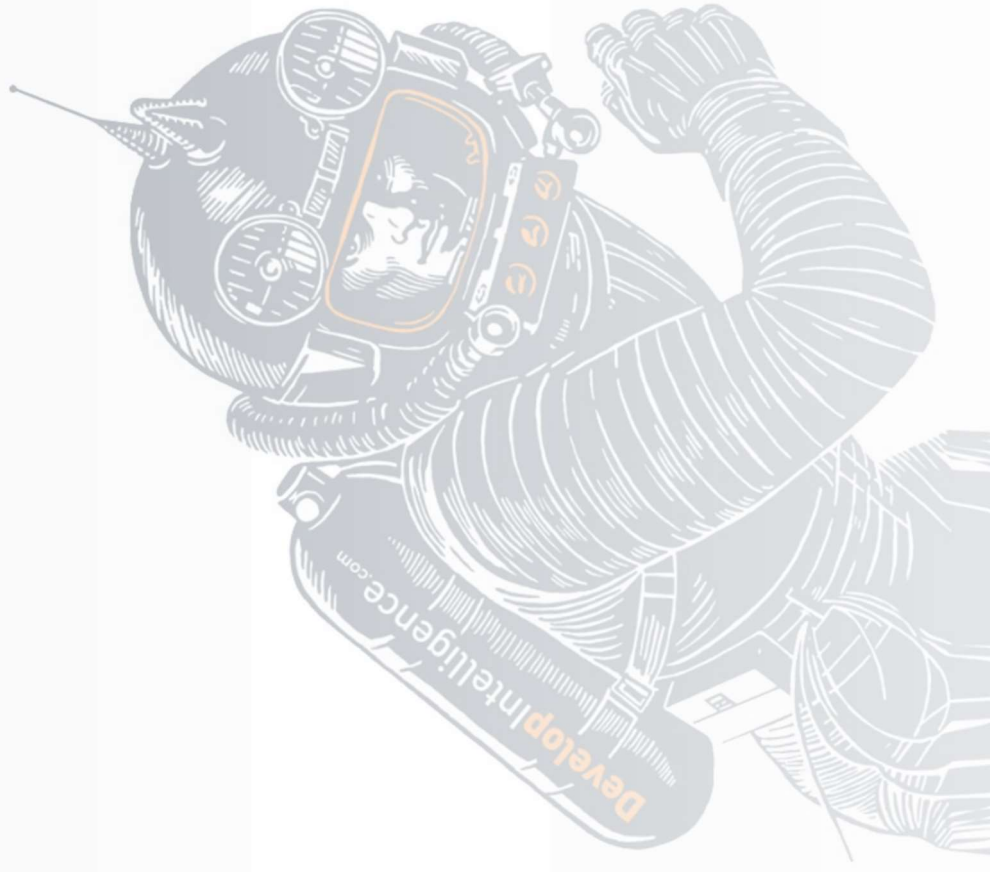
```
1 | git checkout main
```



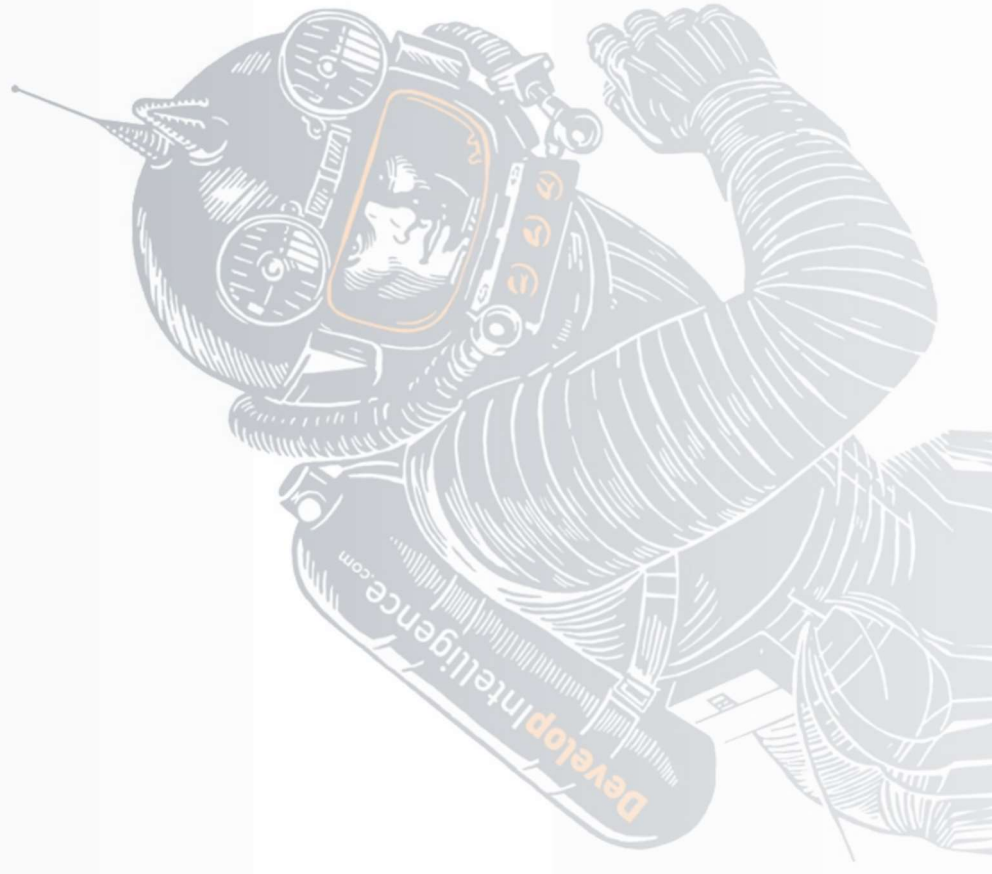

Deleting a Branch

- Eventually, your changes get merged
- (More on that later)

```
1 | git branch -d some-new-branch
```



Merging





***Merging** is Git's way of putting a forked history back together again. The `git merge` command lets you take the independent lines of development created by git branch and integrate them into a single branch.*



- Create a new branch for a bug fix

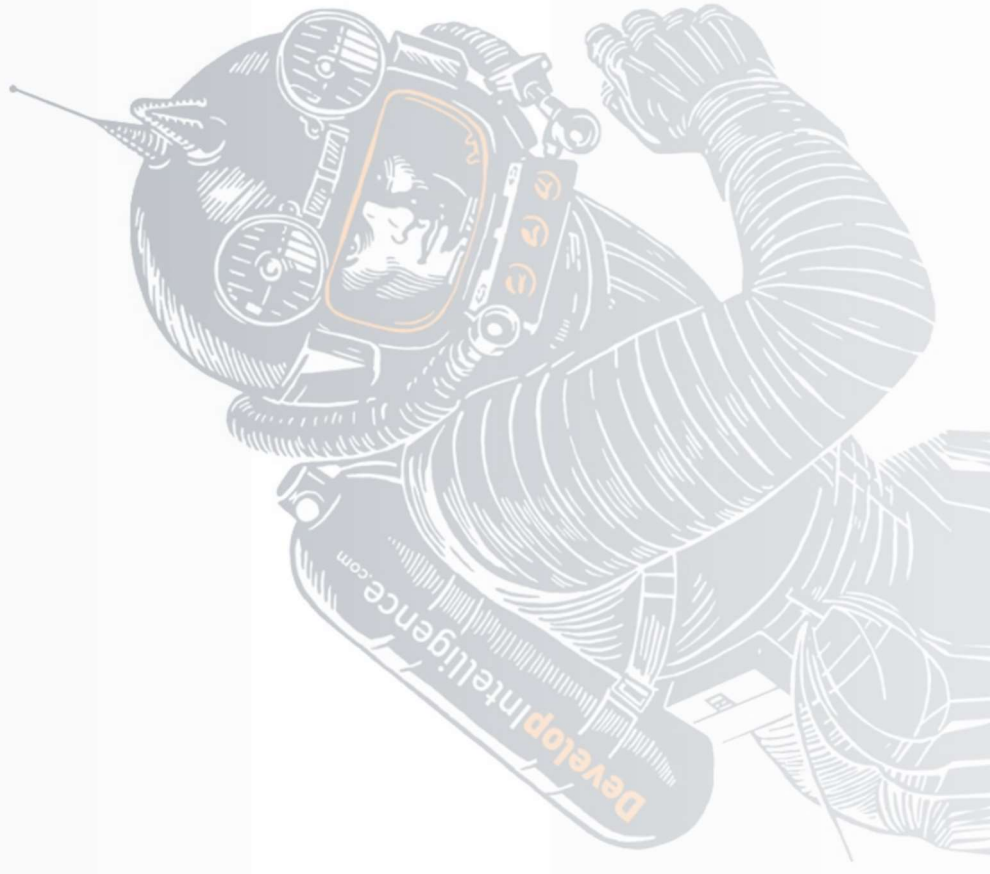
```
1 | git checkout -b bug-6692
```

- (Fix bug.)
- Switch back to main

```
1 | git checkout main
```

- Merge in changes from feature branch, then delete feature branch

```
1 | git merge bug-6692  
2 | git branch -d bug-6692
```





Review

1. Explain why it's a bad idea to work directly on the main branch
2. Name the command to switch between branches

