Exercise 2

SE 3800 001

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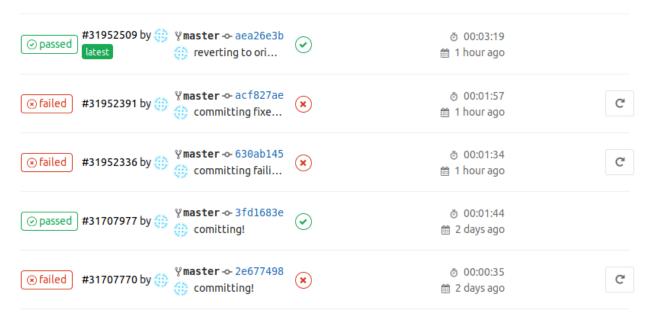
Configuring my account with an SSH key:

Your SSH keys (1)

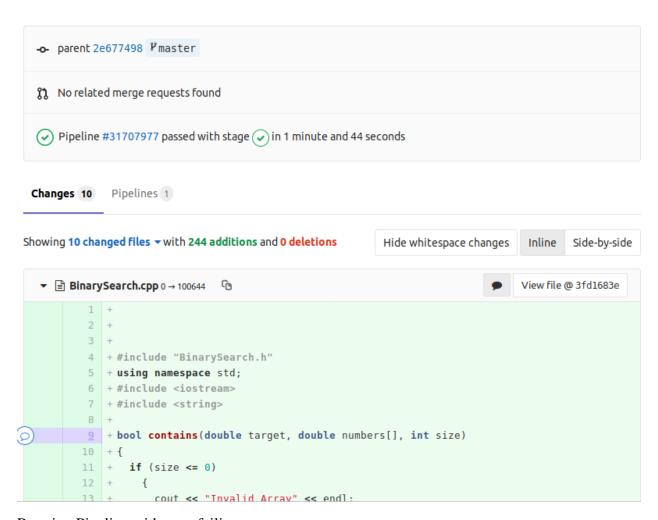
a goreckinj@msoe.edu c1:5f:74:c4:1e:72:6d:06:26:54:d0:0b:28:7c:8f:93 created 1 minute ago files t used: n/a

I can push without having to enter my password:

PIPELINE:



Running Pipeline with all tests passing:

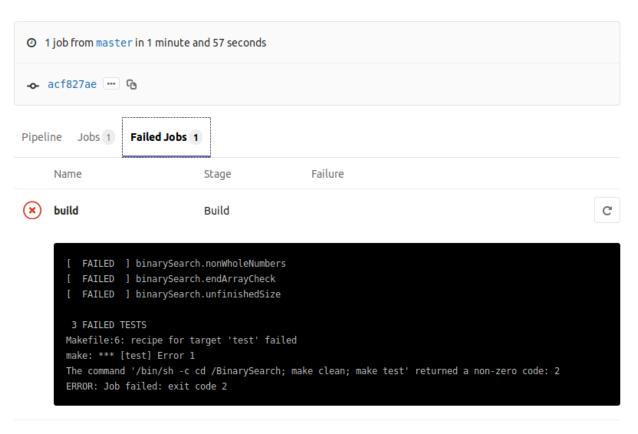


Running Pipeline with tests failing:

The following code boxed in yellow was changed from a 1 to a -1. This makes it so that if the number being searched for is greater than the currently compared number, it will shift left rather than right in the array:

```
int compare(double selected, double target)
{
   if (selected >= target - 0.000001 && selected <= target + 0.0
   {
     return 0;
   }
   else if (selected > target + 0.000001)
   {
     return -1;
   }
   else
   {
     return -1;
   }
}
```

Here's what happens when the new change is then committed:



CPPCHECK:

Checks Passing:

```
osboxes@osboxes:~/ex2-goreckinj$ cppcheck --enable=all supress=missingInclude .
Checking BinarySearch.cpp ...
[BinarySearch.cpp:19]: (style) The scope of the variable 'selected' can be reduced.
[BinarySearch.cpp:20]: (style) The scope of the variable 'center' can be reduced .

1/3 files checked 33% done
Checking BinarySearchTest.cpp ...
2/3 files checked 66% done
Checking main.cpp ...
3/3 files checked 100% done
(information) Cppcheck cannot find all the include files (use --check-config for details)
```

Check Failing:

I commented out where the variable that is the center of the selected array portion is stored. This means that the center variable will never have an assigned value. This should throw an error, since it is used later on in the code.

The result:

```
osboxes@osboxes:~/ex2-goreckinj$ cppcheck --enable=all supress=missingInclude .
Checking BinarySearch.cpp ...
[BinarySearch.cpp:19]: (style) The scope of the variable 'selected' can be reduced.
[BinarySearch.cpp:47]: (error) Uninitialized variable: center
[BinarySearch.cpp:29]: (error) Uninitialized variable: center
[BinarySearch.cpp:42]: (error) Uninitialized variable: center
1/3 files checked 33% done
Checking BinarySearchTest.cpp ...
2/3 files checked 66% done
Checking main.cpp ...
3/3 files checked 100% done
(information) Cppcheck cannot find all the include files (use --check-config for details)
```

And it does. We have three errors in regard to the center variable and the center variable is used three more times in that method:

```
selected = numbers[center];
home = center + 1;
end = center - 1;
```