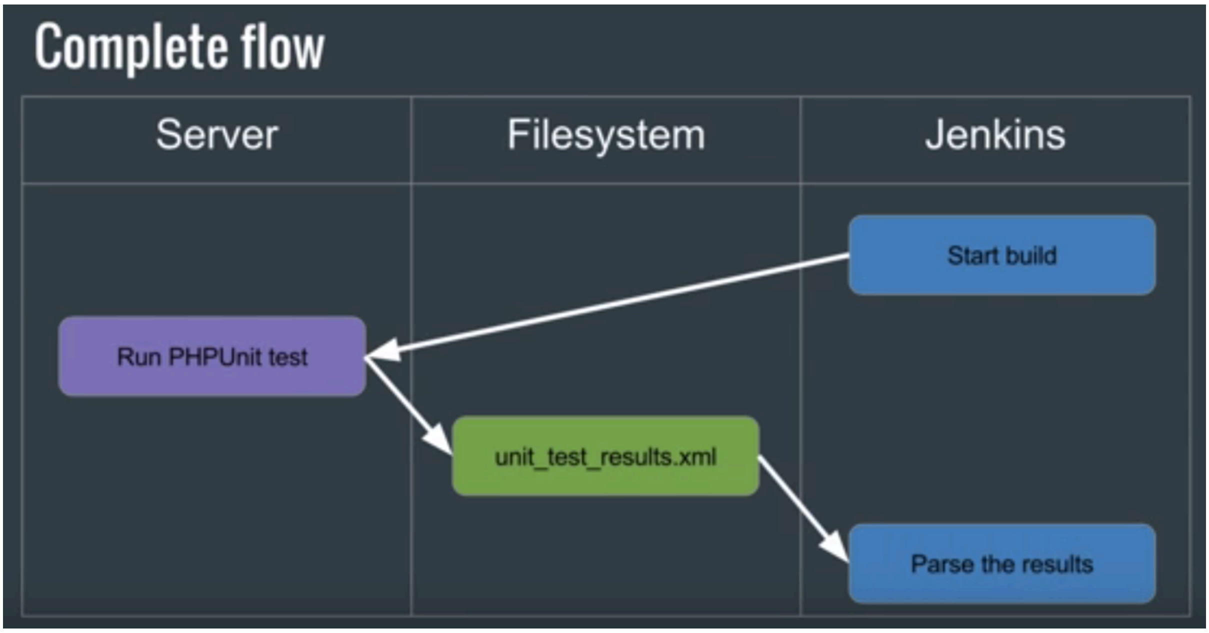
Running PHPUnit tests after each commit

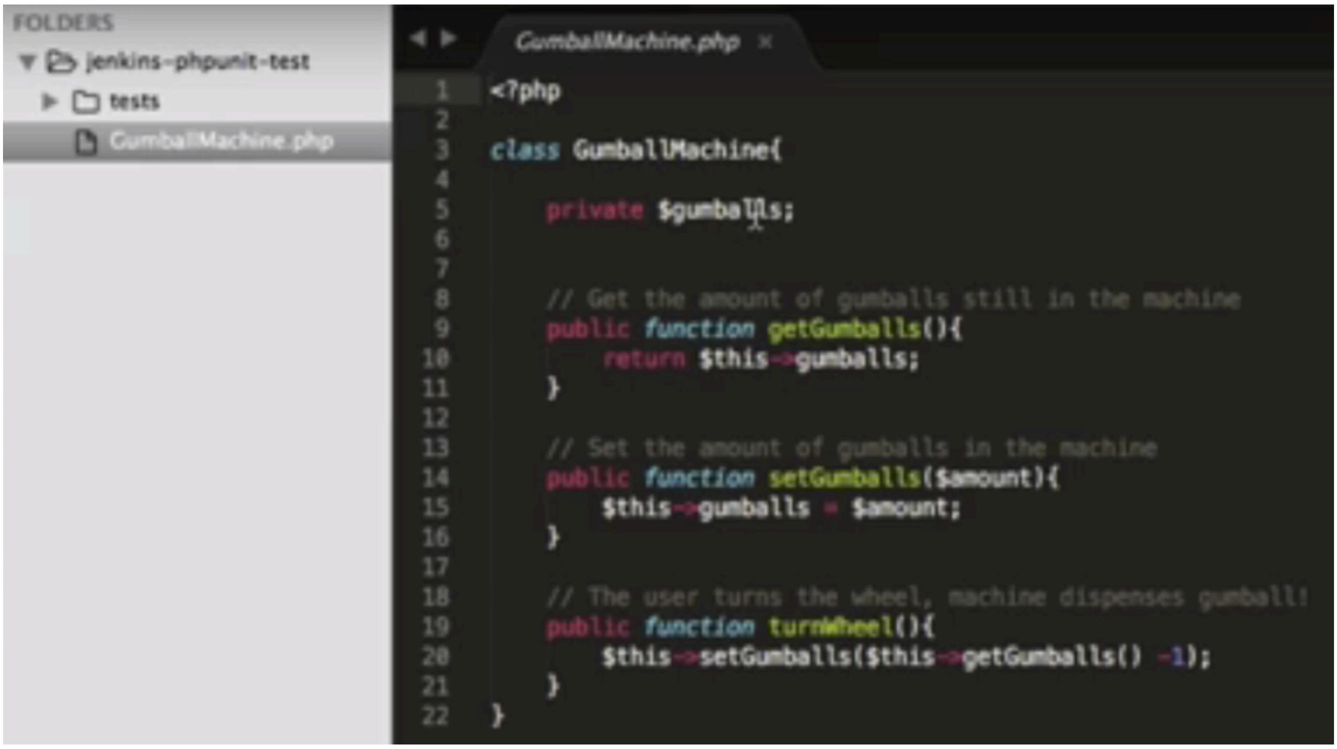
Required Flow: -

Code Commit -> Jenkins Job trigger -> Runs PHPUnit test cases -> Output in a file -> Jenkins parse this file and checks if all cases have passed
-> If Yes, then Code is deployed / Build is complete
-> If No, then code is not deployed / Build fails.


Complete flow

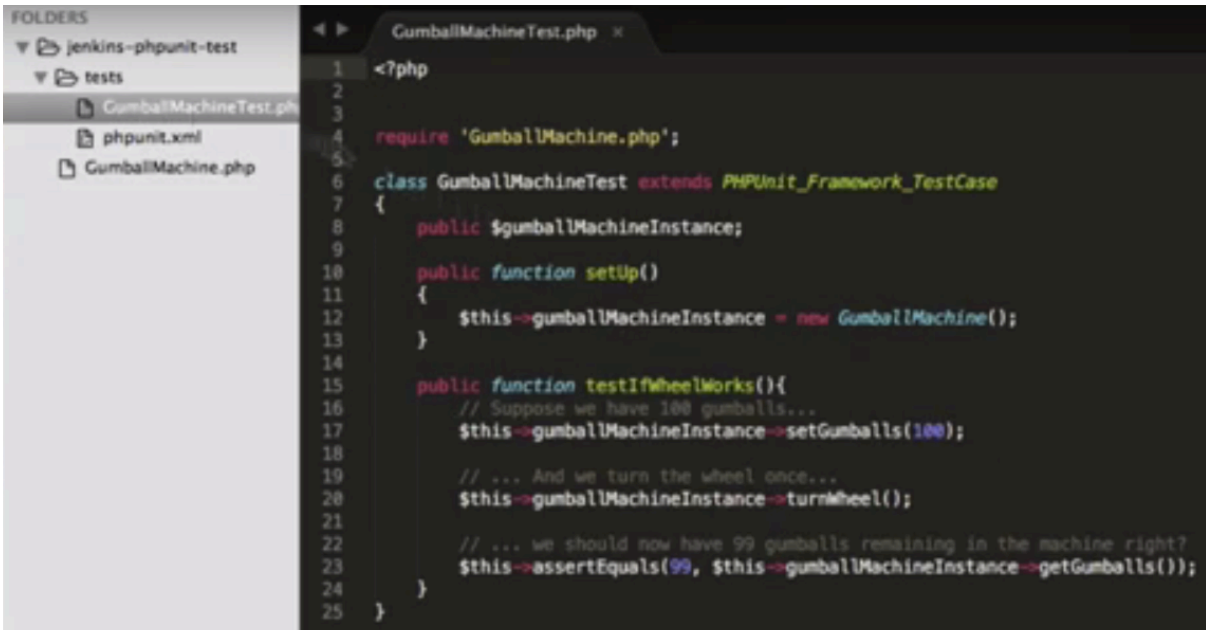
Sample Project ->

Demo PHP Class



```php
<?php

class GumballMachine{

    private $gumballs;


    // Get the amount of gumballs still in the machine
    public function getGumballs(){
        return $this->gumballs;
    }

    // Set the amount of gumballs in the machine
    public function setGumballs($amount){
        $this->gumballs = $amount;
    }

    // The user turns the wheel, machine dispenses gumball!
    public function turnWheel(){
        $this->setGumballs($this->getGumballs() -1);
    }
}
```

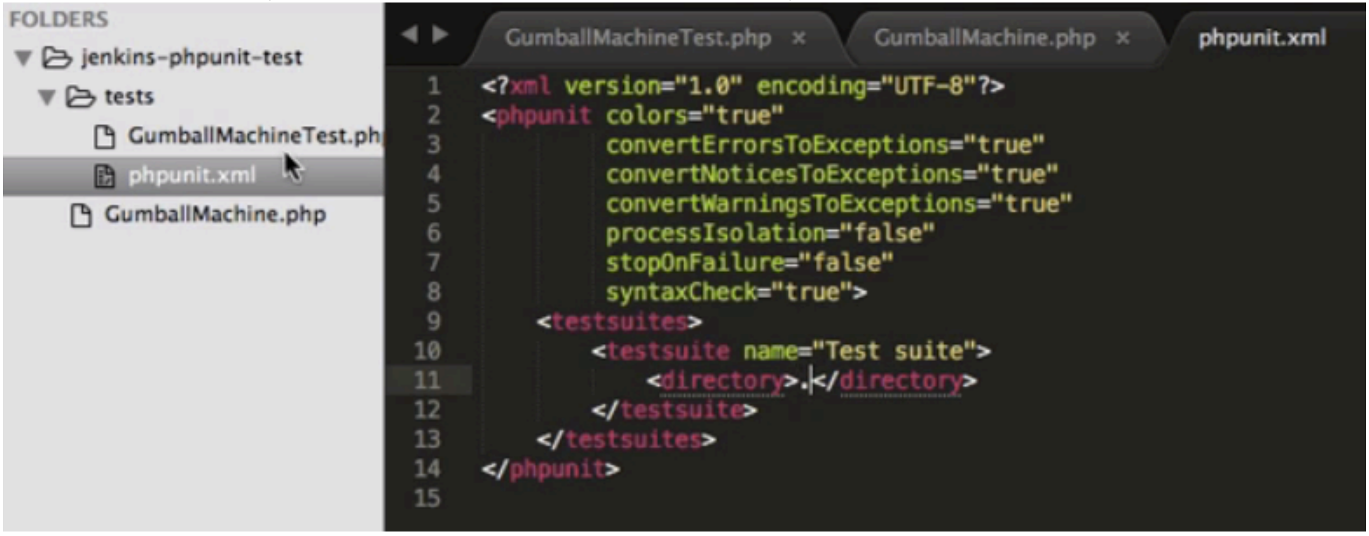
PHPUnit_Framework_TestCase



```php
<?php


require 'GumballMachine.php';

class GumballMachineTest extends PHPUnit_Framework_TestCase
{
    public $gumballMachineInstance;

    public function setUp()
    {
        $this->gumballMachineInstance = new GumballMachine();
    }

    public function testIfWheelWorks(){
        // Suppose we have 100 gumballs...
        $this->gumballMachineInstance->setGumballs(100);

        // ... And we turn the wheel once...
        $this->gumballMachineInstance->turnWheel();

        // ... we should now have 99 gumballs remaining in the machine right?
        $this->assertEquals(99, $this->gumballMachineInstance->getGumballs());
    }
}
```

Set it up on Bit Bucket with same Folder structure.

This xml will basically run all the tests in the current directory –



```xml
<?xml version="1.0" encoding="UTF-8"?>
<phpunit colors="true"
         convertErrorsToExceptions="true"
         convertNoticesToExceptions="true"
         convertWarningsToExceptions="true"
         processIsolation="false"
         stopOnFailure="false"
         syntaxCheck="true">
    <testsuites>
        <testsuite name="Test suite">
            <directory>.</directory>
        </testsuite>
    </testsuites>
</phpunit>
```

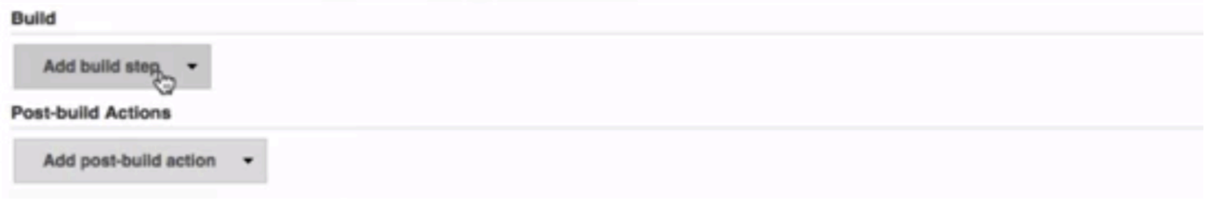
Set Up Job in Jenkins -

Required on Jenkins Server ->

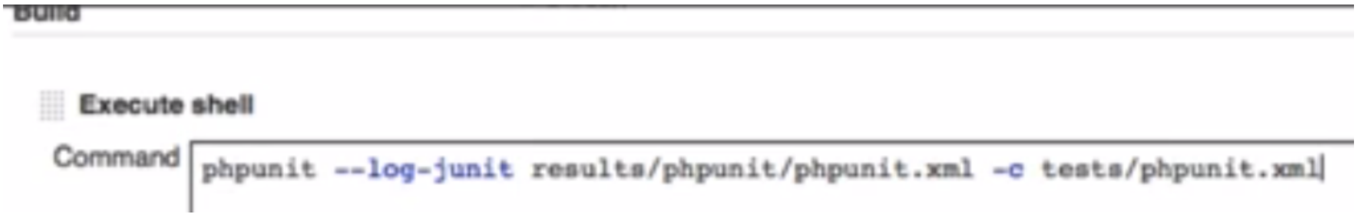
1. Install PHPUnit Plugin [Sudo apt-get install phpunit]
2. Verify the JUnit Plugin is installed [JUnit Plugin - JUnit output file(xml)]

Set up Git, Poll SCM()

In the build section –



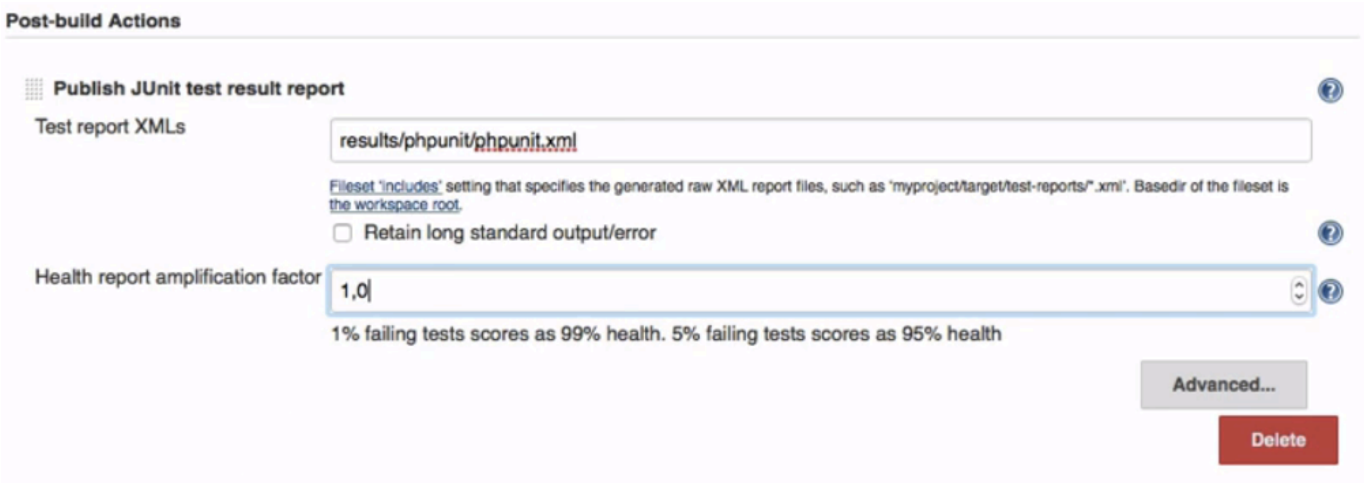
Choose Execute shell



Command

```
phpunit --log-junit results/phpunit/phpunit.xml -c tests/phpunit.xml
```

and in Post build action Publish JUnit Test result report, the same path that was set in execute shell step –



Post-build Actions

Publish JUnit test result report

Test report XMLs: results/phpunit/phpunit.xml

Fileset 'includes' setting that specifies the generated raw XML report files, such as 'myproject/target/test-reports/*.xml'. Basedir of the fileset is the workspace root.

□ Retain long standard output/error

Health report amplification factor: 1,0

1% failing tests scores as 99% health. 5% failing tests scores as 95% health

1.0 signifies the % of test cases that we want the build to PASS in order to succeed.