

Test Plans:

Test Plan 1-

Test plan 1 describes the software attributes of our new website, as well as its limitations. This includes almost any of the work done by the site to accommodate users/administrators.

Verification:

- The Design:
 - In order to execute this test plan, test cases should be used to verify the accuracy of the site and its functionality. We plan to use multiple cases, described more thoroughly in the testCase excel sheet linked below, in order to identify any potential errors in the system code/program. In order to execute the test cases we will hire another team of programmers/developers to access the site and run tests on each specific method. If a specific test case fails, they should re-write the method or fix what is causing the error so that the site runs as intended.
- Test Strategies:
 - Unit testing- test individual components of the software in search of any errors.
 - Integration testing- test the software together as one and bugfix.
 - Performance/stress testing- test the software on a high amount of user capacity to see how the performance varies.
 - Security testing- ensure the software is secure and adheres to all legal precedents.
- Vectors:
 - Login functionality- test the user's login process and make sure their username and password is secure.
 - Product search- test that the movie and time selection are functional
 - Checkout test- make sure the user receives their tickets after purchasing

Test Plan 2-

Test plan 2 will test the hardware limitations of the users. These tests will include any formatting or layout changes, processing speed, and any other limitations depending on the hardware the user is using.

Verification:

- The Design:

- Specification- the device must be required to have stable internet connection as well as access to the internet.
- Test Strategies:
 - Functional testing- test normal functionality on each device, and note any differences.
 - Stress testing- test the functionality of each device in an extreme scenario, for example, while the device is running hot or overloading information and note the performance.
 - Performance Testing- test the performance of the website and record how long it takes to get movie tickets and compare the times.
- Vectors:
 - Zero input test: test to see if $0 + 0 = 0$ to test the adder on each device.
 - Max value test: add `MAX_VALUE` + `MAX_VALUE` to see how each device handles the `MAX_VALUE` considering the `MAX_VALUE` varies per device.
 - Carry bit test- add numbers with various carries, to see if all bit operations are functional and if there are any variations between devices.
 - Boundary Test- test numbers both inside and outside of each hardware's boundaries and see how the results vary, this is especially important as these variations could lead to a change in performance between the devices.