

# Master Test Plan for <https://www.bbc.com/>

## 1. Test Plan Identifier

MTP-WEBBBCOM-v1.0.00

## 2. Introduction

The purpose of this document is to lay out the master plan for testing the functionalities of BBC website as of version N (version currently in development). This version contains features perceiving information in text and video formats, for searching for news articles, viewing the weather and listening to music.

Version N introduces no new features. It consists solely of refactored code and bug fixes for existing features.

This test plan focuses on testing the features most important to the customer and also the features most likely to be broken in time of the bug fixing process.

Test plan was drafted in accordance with the IEEE 829 standard.

## 3. Test Items

- 3.1 BBC website (main domain - <https://www.bbc.com/>);
- 3.2 BBC News mobile app;
- 3.3 BBC databases (list of ...);
- 3.4 BBC servers (list of ...);
- 3.5 BBC «Main pages», «Weather section» and «Sounds section» wrappers.

## 4. Features to be Tested

|   |             |
|---|-------------|
| 4.1 Login/Logout process                                | Low risk    |
| 4.2 Account registration                                | Low risk    |
| 4.3 Password recovery                                   | Low risk    |
| 4.4 Your account settings                               | Medium risk |
| 4.5 Articles blocks                                     | High risk   |
| 4.6 Built-in video player                               | Medium risk |
| 4.7 Built-in audio player                               | Medium risk |
| 4.8 Search field  | High risk   |
| 4.9 Website navigation section                          | High risk   |
| 4.10 BBC on other languages section (change sub-domain) | Low risk    |
| 4.11 Football tables block                              | Low risk    |
| 4.12 Weather forecast section                           | Medium risk |
| 4.13 Weather widget                                     | Medium risk |
| 4.14 Transition from article preview to full article    | High risk   |
| 4.15 Ads sections                                       | Low risk    |

Features with High Risk are the ones most vital to the customer.

## 5. Feature not to be tested

- 5.1 Online welcome chat for customers - not to be included in these release;
- 5.2 BBC TV program guide - will be released but not tested as a functional part of the release;
- 5.3 The ability to leave comments on articles - will be released but not tested as a functional part of the release;
- 5.4 World map widget - not to be included in these release;
- 5.5 Social media widgets - low risk; not vital to customer.

## 6. Approach

The testers will be performing Black Box testing exclusively. Emphasis will be on Functional testing over Non-functional testing. No special testing tools will be used beyond the usual in-house test automation tool.

The following metrics will be collected during testing:

- Total number of test cases;
- Total number of defects identified;
- Total number and percentage of test cases that passed;
- Total number and percentage of test cases that failed;
- Total number and percentage of test cases that executed;
- Average number of test cases that was run;
- Average time taken to fix defects;
- Average number of test cases that was run per working day;
- Percentage and number of defects that were identified;
- Percentage and number of defects that were fixed;
- Percentage and number of defects that were not fixed;
- Percentage and number of defects that were deferred to the next sprint.

Hardware to be used:

- Mac Book Air 13" (with M1 chip);
- Dell XPS ultrabook 14" (with Intel i7 5th generation chip);
- Apple iPhone 13;
- Google Pixel 6.

Software to be used:

System:

- MacOS Big Sur (desktop OS);
- Windows 11 64bit (desktop OS);
- Windows 10 SP2 64bit (desktop OS);
- Linux Mint 20.2 64bit (desktop OS);
- Ubuntu 21.10 64bit (desktop OS);
- iOS 15 (mobile OS);
- Android 12 (mobile OS).

Application (latest versions of):

- Safari;
- Google Chrome;
- Internet Explorer;
- Opera;
- Mozilla Firefox;
- Microsoft Edge.

The main website will be tested on different OS's (count: 7), on different browser applications (count: 6) and on four different hardware architectures. (count: 4).

|                   | MacOS Big Sur | Windows 11 64bit | Windows 10 SP2 64bit | Linux Mint 20.2 64bit | Ubuntu 21.10 64bit | iOS 15 | Android 12 |
|-------------------|---------------|------------------|----------------------|-----------------------|--------------------|--------|------------|
| Safari            | +             | +                | +                    | +                     | +                  | +      | +          |
| Google Chrome     | +             | +                | +                    | +                     | +                  | +      | +          |
| Internet Explorer | -             | +                | +                    | +                     | +                  | -      | -          |
| Opera             | +             | +                | +                    | +                     | +                  | +      | +          |

|                    | MacOS<br>Big Sur | Windows<br>11 64bit | Windows<br>10 SP2<br>64bit | Linux Mint<br>20.2 64bit | Ubuntu<br>21.10<br>64bit | iOS 15 | Android<br>12 |
|--------------------|------------------|---------------------|----------------------------|--------------------------|--------------------------|--------|---------------|
| Mozilla<br>Firefox | +                | +                   | +                          | +                        | +                        | +      | +             |
| Microsoft<br>Edge  | -                | +                   | +                          | +                        | +                        | +      | +             |

In the table above, using the red, yellow and green color indicated the priority for testing of combinations of software and hardware, where:

- green - high priority;
- yellow - middle priority;
- red - low priority.

In total 38 different configurations will be tested in total.

This release of the BBC website has no new features compared to the version of the site that is currently in use by the customers. It consists solely of refactored code and bug fixes for existing features. Some parts of the website code as well as the «Weather forecast section» and «Build-in video player» wrapper code have undergone considerable refactoring. In most cases the changes have been small in the scope but many modules were affected as a consequence.

We will carry out regression testing based on the priority of tasks for the software part. Priority for regression testing will be given to the Unit part. Fewer regression tests will be done at the integration and system levels. At the acceptance level will be done the regression testing again.

## 7. Item Pass/Fail Criteria

Testing pass when:

- All lower test levels were completed;
- No critical defects were encountered or were left unfixed;
- 85% or more test cases at each test levels completed without defects and the remaining 15% or less with minor defects;
- Not more than 3 independent major defects or major defects that trigger only 1 dependent minor defect in total were left unfixed. They will be deferred to the next milestone.

Testing fail when:

- Any lower test levels were failed;
- Any major defect left unfixed is dependent on another major defects;
- Any major defect left unfixed will result in several dependent minor defects;
- Less than 85% test cases at each test level completed without defects and more than 15% with minor defects.

## 8. Suspension Criteria and Resumption Requirements

Suspend testing when:

- If smoke tests failed;
- 4 or more major defects have been found;
- 10 or more minor defects have been found;
- 1 critical defect have been found.

Resume testing when:

- If smoke tests passed;
- Fixed all major previously detected defects, except for 2 (maximum);
- Fixed all minor previously detected defects, except for 4 (maximum);
- A previously encountered critical defect has been fixed.

## 9. Test Deliverables

The following artifacts will be produced after all tests are done:

- Master test plan document;
- Test cases (which we used);
- Test design specifications;
- Logs made by test automation tool;
- Error logs and execution logs;
- Problem reports (defects that are reported to Jira) and corrective actions (all comments on how these defects were fixed).

## 10. Remaining Test Tasks

If all of the tests will be done in current milestone in this sprint - no test tasks will be carried over to the next testing phase.

## 11. Environmental Needs

Considering that we are testing a website, the users of which will use it from different devices, it's important to test BBC website on regular Personal Computers and smartphones (for 2021 year) but, at the same time, on the latest released devices. To perform testing according to the Masters test plan we need next new environment:

- Google Pixel 6;
- Apple iPhone 13.

## 12. Staffing and Training needs

Estimating the scope of tasks for testing, no additional staff or training is currently required, and it is no expected to be use during this testing process. Testing of this build will be performed by one QA engineer.

## 13. Responsibilities

Below is the list of team members who are responsible for specific tasks.

Project manager: observes the project development, testing and production. Can provide the required training.

Product owner: provides communication between the QA team and the stakeholders.

Business Analyst: analyses requirements and sets risks.

QA Lead: productivity and achievements of the team, determining the testing capacity of each product delivery, testing resources deployment.

Test System Administrator: ensures that the test environments and assets are all in place and, of course, correctly installed, workable and well maintained.

Test designer: creates, optimizes and adjust test design strategies. Documents test plan. Documents and prioritizes test cases.

QA Engineer: creating test plan and test cases, executes test cases, logs defects, creating documents about test results.

#### 14. Schedule

| Task                         | Milestone Date          |
|------------------------------|-------------------------|
| Setup Test Environment       | 01/11/2021 - 17/12/2021 |
| Complete Unit Testing        | 20/12/2021 - 04/02/2022 |
| Complete Integration Testing | 07/02/2022 - 18/03/2022 |
| Complete System Testing      | 21/03/2022 - 29/04/2022 |
| Complete Acceptance Testing  | 02/05/2022 - 10/06/2022 |

This schedule is based on realistic and validated estimates of development and design departments on 25/10/2021.

#### 15. Risks and Contingencies

The biggest risk in this project is changing the original requirements, which were negotiated when the testing process has already begun. This also takes into account the introduction of additional requirements, because it obliges to refine the product, create and plan new test cases, and conduct additional regression testing. These risks will be reduced if the original requirements are spelled out and estimated more accurately. If critical changes are made to the requirements, when the product is already in the testing process, then it is necessary to discuss the introduction of additional milestones, which will postpone the delivery of the finished product to a later date, focusing on the Product Owner's decision.

Probable Contingencies, as a sick leave or extra day off already included to the estimation.

#### 16. Approvals

This document is approved by:

| Title:           | Name and Surname: | Date:      | Signature: |
|------------------|-------------------|------------|------------|
| Product Owner    | Lee Johnson       | 27.10.2021 |            |
| Project Manager  | Jim Patters       | 27.10.2021 |            |
| Business Analyst | Colin Marshall    | 27.10.2021 |            |
| QA Lead          | Samuel Falenko    | 27.10.2021 |            |