**Test Plan for nopCommerce Homepage News Module**  
**Application URL:** <https://demo.nopcommerce.com/>   
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**Date:** 28/08/2025

**1. Test Plan Identifier**  
TP-nopCommerce-News-2025-v1

**2. Introduction**  
This test plan outlines the testing strategy for the News section functionality located on the nopCommerce homepage. This section is critical for user engagement, informing customers about company updates, new products, and promotions. This plan covers the display of news items, navigation to detailed news pages, and the subscription feature.

**3. Test Items**

* News section presence and layout on the homepage.
* Display and formatting of news item titles and short descriptions.
* Navigation from a news headline to its full article page.
* Layout and content of the full news article page.
* News comment functionality (viewing, adding, and validation of comments).
* News subscription functionality (success and error scenarios).
* Pagination functionality within the news archive.

**4. Features to be Tested**  
**News Section on Homepage:**

* Verification that the "News" section header is present.
* Verification that news items are displayed with a title, short description, and "Read more" link.
* Verification of the correct number of news items are displayed (e.g., top 3 news posts).

**News Article Navigation:**

* Clicking a news headline or "Read more" link correctly navigates to the full article page.

**Full News Article Page:**

* Verification that the full article title, date, and content are displayed correctly.
* Verification that a "New comment" section is present.
* Verification that existing comments are displayed (if any).

**News Commenting:**

* Adding a valid comment (with Title and Comment text).
* Validation of mandatory fields when submitting a comment.
* Verification that a success message appears upon successful comment submission.
* Verification that the new comment appears in the comments list (after admin approval, if applicable).

**News Subscription:**

* Successful subscription with a valid email address.
* Validation error when attempting to subscribe with an invalid email format.
* Validation error when attempting to subscribe with an empty email field.
* Verification that a duplicate email address is handled appropriately (success message or specific error).

**News Archive Pagination:**

* Navigation to the news archive page from the homepage link.
* Verification that pagination controls work correctly (next, previous, page numbers).
* Verification that the correct number of news items are displayed per page.

**5. Features Not to be Tested**

* The backend administration of news posts (adding, editing, deleting news via the admin panel).
* The moderation workflow for comments in the admin panel.
* The email delivery mechanism for news subscriptions.

**6. Approach**  
**Manual Testing:** Initial exploratory testing and validation of all scenarios.  
**Automation Testing (Primary):** All test scenarios will be automated using the defined tech stack.

* **Framework:** Selenium WebDriver with Java.
* **Pattern:** Page Object Model (POM) for maintainability.
* **BDD:** Scenarios will be written in Gherkin in .feature files.
* **Execution:** Tests will be grouped and executed using TestNG, capable of parallel runs.
* **Data-Driven Testing:** Test data for subscriptions and comments will be externalized using cucumber Examples in the Gherkins .feature file or Excel/JSON files.
* **Cross-Browser Testing:** Automated tests will be run on Chrome, Firefox, and Edge browsers.
* **Reporting:** Extent Reports will be generated after each execution cycle for analysis.

**7. Item Pass/Fail Criteria**  
**Pass:** The actual result of the test case matches the expected result defined in the Gherkin scenario.  
**Fail:** The actual result deviates from the expected result, the test script throws an unhandled exception, or a defect is found.

**8. Suspension Criteria and Resumption Requirements**  
**Suspension:** Testing will be suspended if the nopCommerce demo environment is unavailable for more than 2 hours or if a critical bug in the build (e.g., homepage not loading) blocks the execution of over 70% of the test cases.  
**Resumption:** Testing will resume once the environment is stable again or a new build with the critical fix is deployed.

**9. Test Deliverables**

* This Test Plan document.
* Manual Test Cases.
* Automated Test Assets:
  + Feature Files: news.feature, news\_subscription.feature
  + Page Objects: Homepage.java, Newspage.java, Newsdetailspage.java
  + TestNG XML files.
* Extent Reports.
* Defect Reports in JIRA.

**10. Environmental Needs**

* **Application:** nopCommerce Demo Website
* **Test OS:** Windows 10/11.
* **Browsers:** Chrome, Firefox, Edge
* **Automation Environment:**
  + JDK 17.
  + Maven 3.8.11
  + IDE: Eclipse.
  + Selenium WebDriver & Browser Drivers.
* **Version Control:** GitHub repository.
* **Project Management:** JIRA for task and defect tracking.

**11. Responsibilities (Aligned with Capstone Roles)**

* **Product Owner (PO):** Prioritize which news features to test first. Sign off on requirements.
* **Scrum Master (SM):** Facilitate daily stand-ups, remove blockers in environment setup or test data creation.
* **Developers:** Implement the automation scripts, page objects, and framework utilities. Integrate with Extent Reports.
* **Testers:** Design manual test cases, verify automation results, and log detailed defects in JIRA.

**12. Schedule**

| **Activity** | **Timeline** |
| --- | --- |
| Test Planning & Case Design | Day 1 |
| Automation Script Development | Day 4-5 |
| Test Execution & Bug Logging | Day 8 |
| Retest & Cross-Browser Execution | Day 11 |

**13. Risks and Contingencies**

* **Risk:** The demo site's news content or subscription service might change, breaking automated selectors.

**Contingency:** Use robust, relative locators (e.g., XPath axes, CSS selectors) not dependent on absolute text. Implement regular script maintenance cycles.

* **Risk:** Comments on the public demo site may be disabled or behave unpredictably due to high traffic.

**Contingency:** Focus testing on the UI elements and form validation rather than the persistence of the comment in the public list.

**14. Approvals**  
Test Lead: John Doe  
Product Owner: John Doe