## **Bug Detection System**

An adaptation of the standard Cockburn template will be used. The template and examples follow:

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| ID and name | UC-1: Add a Bug | | |
| Primary actor | Test Engineer | Secondary actors | Bug Tracking System |
| Description | A Test Engineer accesses the BTS from corporate intranet, views the menu, and fills a form with a name for the bug and a description and submits it, and after that the list of bugs is updated with the one introduced and can be seen by everyone. | | |
| Trigger | A Test engineer discovers a new bug. | | |
| Preconditions | PRE-1. The user is logged as Test Engineer  PRE-2. The bug that he wants to add is not in the list already. | | |
| Postconditions | POST-1. The bug is stored in BTS(Bug Tracking System) with a status of “Accepted”.  POST-2. The bug list is updated and the new bug can be seen by everyone. | | |
| Normal flow | 1. **Tester identifies an issue** and decides to log a bug.  2. **Tester opens the Bug Tracking System (BTS)** and selects "New Bug."  3. **Tester enters bug details** (title, description, steps to reproduce, expected vs. actual results).  4. **Tester attaches supporting files** (screenshots, logs, or recordings).  5. **Tester sets bug attributes** (severity, priority, affected components, environment).  6. **Tester submits the bug report.**  7. **BTS updates the bug list**, making the new bug visible to all developers. | | |
| Alternative flows | None | | |
| Exceptions | The bug with the same name already exists so the tester gets an error. | | |

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| ID and name | UC-2 Resolve a Bug | | |
| Primary actor | Software Engineer | Secondary actors | Bug Tracking System |
| Description | A Programmer accesses the BTS from the corporate intranet, views the list of reported bugs, selects a bug to work on, updates its status when fixing, and finally marks it as resolved. The bug is then removed from the active bug list visible to other programmers. | | |
| Trigger | |  | | --- | |  |   A Software Engineer sees a new bug in system that needs to be resolved. | | |
| Preconditions | PRE-1. The user is logged in as Programmer.  PRE-2. The bug exists in the system with an open status. | | |
| Postconditions | POST-1. The bug is updated with a new status .  POST-2. The bug is removed from the active bug list for all programmers. | | |
| Normal flow | **Software Engineer accesses the Bug Tracking System (BTS)** and views the list of reported bugs.  **Software Engineer selects a bug** from the list to work on.  **Software Engineer analyzes the bug details** (description, reproduction steps, logs).  **Software Engineer starts working on the fix** and updates the bug status to "In Progress."  **Software Engineer resolves the bug** by implementing and testing the fix.  **Software Engineer updates the bug status to "Resolved."**  **BTS removes the bug from the active bug list,** making it no longer visible to other programmers. | | |
| Alternative flows | None | | |
| Exceptions | None | | |