# SWitCH\_QA Project

2022-2023 Ed.

**Sprint 6 Goals** 

#### Sprint 6 – Functional Requirements

- As a member, when I look at the popular posts, I want posts that have more than 2/3 of the comments from the post with the highest comments on the webpage to be highlighted with a green background.
- As a member, when I look at the recent posts, I want posts that have less than 1/3 of the comments from the post with the highest comments on the webpage to be highlighted with a red background.
- As a member, when I look at the unpopular posts, post that have more than 1/3 and less than 2/3 of the comments from the post with the highest comments on the webpage to be highlighted with a yellow background.
- As a member, when I look at the popular, posts with more than five days should have the date in red text.
- As a member, when I look at the unpopular posts, posts with less than two days should have the date in green text.
- As a member, when I look at the recent posts, posts older than two days and newer than seven days should have the date in yellow text.
- As a member, when I look at the popular posts, posts that have no comments should display a purple text stating "Please comment me". This text should link to the comment posting page for that specific post.

## Sprint 6 – Non-Functional Requirements (1/3)

- Each team should design and implement test cases in accordance with black box criteria to be published/announced
- Each team should verify if the unit tests already developed (or existing) in the project violate the unique responsibility principle (or other) and, if so, correct them
- Each team should develop a continuous integration approach in GitHub, that at least should:
  - Compile the frontend and backend in each commit
  - Execute the unit tests in each commit
  - Design and implement a "smoke test", tun run in each commit, that checks the "app" for a minimum of functionality
  - The results of these actions should be published in GitHub

#### Sprint 6 – Non-Functional Requirements (2/3)

- Develop new features by using BDD and TDD approach
  - You should provide clear evidence on the Git commit message about which Software Development Phase the commit is being worked by appending the phase to the beginning of the commit message e.g.:
    - [Analysis]
    - [Design]
    - [Test]
    - [Development]

## Sprint 6 – Non-Functional Requirements (3/3)

- Automate the generation of throughput/capacity reports from your application
  - Provide a Test Scenario where there are at least 25 posts with at least 3 comments each
  - Use JMeter to execute a set of tests that:
    - perform a login on the application
    - requests the popular posts
    - requests the recent posts
    - requests the unpopular posts
    - Executes all the statistical operations
    - Assertions
      - Assert that the results for each statistic operation is correct
      - Assert that the colours for the background, date and new text are correct.
  - This set of tests should be run for 10, 50, 100 and 200 simultaneous users
    - Furthermore, you should increase the number of users to specify above which number of users the statistics results fall below 75% when running with 10 users
  - Each set of tests should be run at least 3 times