

UNIVERSITY OF MISSOURI-COLUMBIA  
COLLEGE OF ENGINEERING  
DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE  
**CS 4320/7320 – SOFTWARE ENGINEERING I**  
**Spring 2024**

**PROJECT3: Software Testing Tools**

**Due Date for Project2: Friday April 26<sup>th</sup>, 2024, at 5:00 pm**

## Objective

Working with and evaluating software testing tools.

## Instructions

- Project3 is a group work and is comprised of two parts, Presentation Part of 60 marks and Report Part of 40 marks.
- Each group needs to present up to a 5-minute presentation plus 2 minutes Q&A, according to a randomly built schedule.
- Each group must prepare a presentation with a live demo for testing a piece of software.
- Your test uses the Software Tool that is assigned to the group.
- Your presentation should address the features of the Software tool in a motivated and clear way.
- Each group presentation will be judged according to the evaluation and rubric sheet attached to this document. All students should attend all presentations for all groups.
- Each group must submit a report that explains the presented tool, you may use the points in the below table as a guide. Include screen shots in your report.
- The report should also include the contribution of each student.
- The Power Point presentations, as well as the reports, should also be submitted before the deadline. **The deadline is April 26, 2024, at 5:00 pm.**

Overview	- General Features - Roles and Input combinations; e.g., Web, mobile, language(s), etc. Testing - Economics; e.g., open source, commercial, customers profile, etc. - History
Testing Interface	- User friendly GUI, Web Brower application
Testing Methods	- Static and dynamic testing, White-box testing, Black-box testing, Visual testing - Automatic correction and fix
Testing Levels	- Unit testing, Integration testing, System testing, Operational Acceptance testing
Testing Types	- Installation & Compatibility testing - Regression, Continuous & Destructive testing - Software performance and Usability testing - Security testing - Domain & Mutation testing - Development testing
Testing Plugins	- Main plugins that add more features and testing
Testing Overall	- The powerful features of this software testing tool - The weakness and missing features that not included in this tool
Testing Reports	- Generated report types and effectiveness

## Project Presentation Evaluation Rubric

Evaluation Marks: 6 Excellent, 4 Very Good, 3 Good and 1 Poor

<b>Time:</b>	:	:	:	:	:
<b>Group</b>					
<b>Criteria</b>					
<b>Introduction &amp; Conclusion</b>	Presents the topic by laying out the overall structure of the presentation (e.g., Agenda). Conclusion or Summary				
<b>Mark</b>					
<b>Motivation &amp; Testing Tool</b>	Motivates the features and the use of the testing tool and Software testing in general. All features and tool applications are accurately presented.				
<b>Mark</b>					
<b>Content &amp; Live demo</b>	Information is very organized with clear titles and subheadings. Live demo is effectively prepared and is supported with the context of the presentation.				
<b>Mark</b>					
<b>Testing Example</b>	A solid testing example is provided which covers most of the Tool features. All test cases are related to the example and make it easier to understand how the tool works.				
<b>Mark</b>					
<b>Eye Contact &amp; Body Language</b>	Holds attention of entire audience with the use of direct eye contact, seldom looking at notes. Movements seem to help the audience visualize.				
<b>Mark</b>					
<b>Q&amp;A</b>	Can answer the questions with concise right answers				
<b>Mark</b>					
<b>Group</b>	All group members attend (participate) and help each other if needed.				
<b>Mark</b>					
<b>Time</b>	Start & finish in 20 minutes, presenting speed is acceptable and consistent				
<b>Mark</b>					
<b>Attractiveness</b>	The presentation is exceptionally attractive in terms of design, content, and neatness.				
<b>Mark</b>					
<b>Overall</b>	An overall effectiveness for the work; Group demonstrates full knowledge of the software under test. Eye-catching, organized-clear-readable slides/ graphs; not busy				
<b>Mark</b>					
<b>TOTAL</b>					