FACULTY OF COMPUTING
UTM Johor Bahru

# INDIVIDUAL ASSIGNMENT 1 (15%)

| | | |
|---|---|---|
| Subject | : | Human-Computer Interaction (SECV2113) |
| Session | : | 2024/2025 Semester 2 |
| Task | : | Website/desktop/mobile application Usability Evaluation |
| Title | : | Analysis Report |
| Duration | : | 2 Weeks (Wk2 – Wk4 11th APRIL 2025 before 12.00 am) |
| Submission | : | This is an **INDIVIDUAL WORK** and must be submitted **INDIVIDUALLY**<br>Upload the report in .PDF format via UTM E-learning |

## Instruction:

### Aim

The aim of this assignment is to give students an early exposure on how usability is measured, to provide hands-on experience in conducting a usability evaluation of selected **website/desktop/mobile application,** and to write an analysis report.

### Description

The usability evaluation on your selected **website/desktop/mobile app** will be based on the questionnaire-based evaluation method. For this assignment, the usability evaluation is performed using **System Usability Scale** (SUS).

For comparison purposes, the minimum number is: **TWO** (2) **website/desktop/mobile app**, or maximum: **THREE** (3) **website/desktop/mobile app.**

### System Usability Scale (SUS)

The System Usability Scale (SUS) was invented by John Brooke who, in 1986, created this 'quick and dirty' usability scale to evaluate practically any kind of system. The SUS has been tried and tested throughout almost 30 years of use, and has proven itself to be a dependable method of evaluating the usability of systems compared to industry standards.

The SUS is a Likert Scale which includes 10 questions which users will answer. Participants will rank each question from 1 to 5 based on how much they agree with the statement they are reading. 5 means they agree completely, 1 means they disagree vehemently. **for the purpose of this assignment, the rank will be coming from you alone*

The **10 questions** (and they should be in this sequence) are as follows:

1. I think that I would like to use this system frequently.
2. I found the system unnecessarily complex.

3. I thought the system was easy to use.
4. I think that I would need the support of a technical person to be able to use this system.
5. I found the various functions in this system were well integrated.
6. I thought there was too much inconsistency in this system.
7. I would imagine that most people would learn to use this system very quickly.
8. I found the system very cumbersome to use.
9. I felt very confident using the system.
10. I needed to learn a lot of things before I could get going with this system.

How to calculate the score?

- For each of the odd numbered questions, subtract 1 from the score.
- For each of the even numbered questions, subtract their value from 5.
- Take these new values which you have found, and add up the total score. Then multiply this by 2.5.

The result of all these tricky calculations is that you now have your score out of 100. This is NOT a percentage, but it is a clear way of seeing your score.

Read more about SUS and what the score means here:
https://usabilitygeek.com/how-to-use-the-system-usability-scale-sus-to-evaluate-the-usability-of-your-website/
Read John Brooke original paper:
https://digital.ahrq.gov/sites/default/files/docs/survey/systemusabilityscale%2528sus%2529_comp%255B1%255D.pdf

You will present your current progress during the class. The final submission is due according to the given date and time.

**Rubrics for Usability Analysis Report (100%)**

From the above evaluation, each student must develop a usability analysis report that describes the following main criteria:

| Criteria | Excellent 10-7 | Fair 6-4 | Basic 3-0 | Weight | Marks |
|---|---|---|---|---|---|
| **Abstract:** Brief explanation (<150 words) on the aim, how you done it? and what did you get? | Complete abstract | Quite complete abstract | Incomplete abstract | 4 | ____ X 4<br>10 |
| **Keywords:** 5 or 6 related keywords | Good keywords | Moderate keywords | Poor keywords | 1 | ____ X 1<br>10 |
| **Introduction:** Includes key on introductory points, aims, motivation, key findings, etc. | Good and comprehensive introduction | Moderate introduction | Poor introduction | 10 | ____ X 10<br>10 |

| | | | | | |
|---|---|---|---|---|---|
| **Method / Procedure:**<br>How was the evaluation constructed and conducted? | Suitable and comprehensive method / procedure | Quite suitable method / procedure | Unsuitable method / procedure | 30 | ____ X 30<br>10 |
| **Results and Discussion:**<br>Results are presented and supported by graphs and/or charts. The analysis and discussion of the score are presented. | The results and discussion are strong and can be accepted | The results and discussion are partially recognizable but does not tie up | There is no clear results and discussion | 40 | ____ X 40<br>10 |
| **Conclusion:**<br>Summary of the key aspects and findings of your usability evaluation and concluding remarks. | Excellent explanation | Fair explanation | Poor explanation | 8 | ____ X 8<br>10 |
| **References:**<br>At least 5 references and follow ACM Numeric Style https://www.acm.org/publications/authors/reference-formatting | Follow the given format, enough number of references and cite them | Some of them follow the given format, enough number of references and cite them | Most of them unfollow the given format, not enough number of references and not citing them | 4 | ____ X 4<br>10 |
| **Appendix:**<br>List of prompts used | Prompts are relevant and help to advance the brainstorming process | Some prompts are relevant but others may lack clear or fail to effectively advance the work | Most prompts are irrelevant or unrelated, providing little or no contribution to the outcome | 3 | ____ X 3<br>10 |
| **Total** | | | | 100 | |

**Note:**
The report should use the ACM Submission template as given here https://www.acm.org/binaries/content/assets/publications/taps/acm_submission_template.docx

**Possible CASE STUDY for this assignment, but are not limited to:**

**1. Social Media Platforms**

- **Facebook vs. Twitter**: Compare user engagement features, content discovery, and ease of navigation.
- **Instagram vs. TikTok**: Evaluate the user experience in content creation, browsing, and interaction.
- **LinkedIn vs. Glassdoor**: Focus on professional networking, job search functionality, and user interface design.

**2. Streaming Services**

- **Netflix vs. Hulu**: Assess content discovery, recommendations, and video playback experience.
- **Spotify vs. Apple Music**: Compare the music streaming experience, playlist creation, and audio quality.
- **YouTube vs. Vimeo**: Evaluate video hosting, user interaction, and content management features.

**3. Educational Platforms**

- **Coursera vs. Udemy**: Compare course discovery, learning paths, and user interface design.
- **Khan Academy vs. Duolingo**: Focus on learning experience, user engagement, and progress tracking.
- **EdX vs. FutureLearn**: Assess course delivery, interaction with instructors, and certification process.

**4. Productivity Tools**

- **Google Docs vs. Microsoft Word (Online)**: Evaluate collaboration features, ease of use, and document management.
- **Trello vs. Asana**: Compare project management, task tracking, and team collaboration features.
- **Slack vs. Microsoft Teams**: Focus on communication features, integration with other tools, and user experience.

**5. Banking/Finance Apps**

- **PayPal vs. Venmo**: Compare payment processing, user interface, and security features.
- **Mint vs. YNAB (You Need A Budget)**: Evaluate budgeting tools, financial tracking, and user experience.
- **Chase Mobile vs. Bank of America App**: Assess mobile banking features, ease of transaction management, and customer support access.

**6. Health and Fitness Apps**

- **MyFitnessPal vs. Lose It!**: Compare calorie tracking, diet planning, and integration with fitness devices.
- **Strava vs. Nike Run Club**: Evaluate user experience in tracking workouts, social features, and data analysis.
- **Headspace vs. Calm**: Focus on meditation experience, ease of navigation, and user engagement.

**7. Travel and Booking Platforms**

- **Airbnb vs. Booking.com**: Assess ease of booking, user reviews, and customer support.
- **Google Maps vs. Waze**: Compare navigation accuracy, user interface, and additional features like traffic updates.
- **Expedia vs. Skyscanner**: Evaluate search functionality, flight booking process, and user interface design.

**8. News and Media Websites**

- **CNN vs. BBC**: Compare news discovery, article readability, and multimedia integration.
- **The New York Times vs. The Guardian**: Evaluate user engagement, content layout, and accessibility features.
- **Reddit vs. Quora**: Focus on content discovery, community interaction, and user experience.

**9. Entertainment and Gaming Platforms**

- **Steam vs. Epic Games Store**: Compare game discovery, purchasing process, and community features.
- **Twitch vs. Mixer (discontinued but still a comparison for historical context)**: Evaluate live streaming experience, user interaction, and monetization features.
- **Xbox Game Pass vs. PlayStation Now**: Assess game library, user interface, and subscription management.

**10. Online Learning Management Systems (LMS)**

- **Moodle vs. Blackboard**: Compare course management, student interaction, and ease of use for both students and instructors.
- **Google Classroom vs. Microsoft Teams for Education**: Evaluate collaboration tools, assignment tracking, and user interface.
- **Canvas vs. Schoology**: Assess learning experience, course delivery, and user engagement features.

**11. Content Management Systems (CMS)**

- **WordPress vs. Wix**: Compare website creation ease, customization options, and plugin support.
- **Drupal vs. Joomla**: Focus on content management, user interface, and scalability.
- **Squarespace vs. Weebly**: Evaluate design flexibility, e-commerce capabilities, and user experience.

**12. Food Delivery Apps**

- **UberEats vs. DoorDash**: Compare food discovery, ordering process, and delivery tracking.

- **Grubhub vs. Postmates**: Evaluate restaurant options, user interface, and customer support features.
- **Deliveroo vs. Zomato**: Assess user experience, restaurant reviews, and ease of payment.