**Group Assignment – CASE STUDY (20%)**
**Sem 2, Session 2024/2025**
**WIE2005/WIE3004**

Theme:
**Analyzing Information Retrieval Systems: Requirements, Interface, and User Experience**

**Objective:**
Each group will be assigned an existing information retrieval system tailored to a specific domain. Then will conduct a system analysis covering:

- Functional and non-functional requirements
- Search interface design and usability
- Query handling and user input mechanisms
- Result presentation and ranking behavior
- Strengths, weaknesses, and improvement opportunities

**Group-Specific Case Study Topics:**

**Group 1**: PubMed (Biomedical Research Retrieval)
Focus: Analyze how the system supports professional users in finding peer-reviewed articles.
Tasks: Study its query capabilities (MeSH terms), filters, abstract previews, export tools.

**Group 2:** Google Scholar vs. Semantic Scholar
Focus: Compare two academic search engines.
Tasks: Analyze interface simplicity, citation tracking, personalization, and result clustering.

**Group 3:** Amazon Search Interface (Product Search)
Focus: Explore how Amazon handles structured data in search.
Tasks: Examine filtering, recommendations, ranking signals, and personalization.

**Group 4:** Indeed or LinkedIn Job Search
Focus: Job search systems for different user profiles (graduates vs. professionals).
Tasks: Evaluate interface for inputting resumes, skill filters, location tagging, and alerts.

**Group 5:** Tripadvisor or Airbnb Experience Search
Focus: Interfaces for travel and local experience discovery.
Tasks: Study UI components, user-generated content, ranking based on ratings/reviews.

**Expected Deliverables:**

- System Overview and User Persona Analysis
- Requirements Breakdown
- Functional (search features, filters, sorting, export)
- Non-functional (performance, usability, accessibility, responsiveness)
- Interface Evaluation
- Query input design

- Result layout and ranking
- Navigation and user flow
- SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats)
- Recommendations for Improvement (based on IR best practices and user-centered design)

**Assessment Criteria:**

- Depth and accuracy of system analysis (10%)
- Identification and articulation of requirements (10%)
- Interface and user experience evaluation (10%)
- Critical thinking and recommendation quality (10%)
- Presentation and documentation (10%)

**Report format: Maximum 20 pages**
**Other format:**

- **Font: Times New Roman or Arial**
- **Font Size: 11 or 12 pt**
- **Line Spacing: 1.5**

**Report Submission Due Date: 21 May 2025**
**Where to submit: In Spectrum & Teams**

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IMPORTANT:

You are required to provide evidence that your analysis is based on your own understanding and exploration of the assigned system. Wherever applicable, include screenshots, annotated interfaces, search examples, and personalized commentary or observations to support your findings.

Submissions that rely solely on generic descriptions or appear AI-generated (e.g., copied from tools like ChatGPT) without supporting evidence or critical analysis may be penalized for lack of originality.

To ensure authenticity, each group must include:

- At least 3 screenshots of the system being analyzed, with your own queries or interactions.
- A brief reflection section (100–150 words) at the end explaining how you carried out the analysis and avoided using pre-written content from AI tools.