

Module 2 Assignment – Case Studies for Different Student Profiles

Case Study 1: Teacher (Fairly Easy)

Scenario: Finding Reliable Educational Resources

You are a history teacher preparing a lesson on the Causes of World War II for high school students. You need to find reliable, well-structured, and engaging digital resources for your students, including articles, videos, and lesson plans.

Assignment Tasks:

1. Use Boolean operators and Google Advanced Search techniques to find educational resources only from trusted domains (.edu, .gov, .org).
2. Identify two websites that provide accurate and engaging lesson plans.
3. Use fact-checking techniques to ensure the credibility of an online article that discusses WWII causes.
4. Compare two search engines (Google vs. DuckDuckGo)—Do the same queries return different results?

What students learn: Refining search queries, using Boolean logic, and evaluating source credibility.

Case Study 2: Nursing Student (Moderate Difficulty)

Scenario: Researching a Medical Condition

You are a nursing student researching the latest treatments for Type 2 Diabetes for an academic paper. Your professor asked you to find recent, peer-reviewed medical studies from trusted sources, but when you search, you get overwhelmed with irrelevant or outdated results.

Assignment Tasks:

1. Use Google Scholar and apply search filters (last 5 years, peer-reviewed journals, and medical-specific sources like PubMed or WHO).
2. Use Boolean operators to narrow down your results (e.g., "Type 2 Diabetes AND Treatment NOT Alternative Medicine").
3. Identify two high-quality medical studies that discuss new advancements in diabetes treatment.

4. Explain how your search results were affected by personalization or search bias—did your location or past searches influence the results?

What students learn: Using Google Scholar, filters, and domain-specific searches to retrieve high-quality academic research.

Case Study 3: Cybersecurity Student (Advanced Difficulty)

Scenario: Investigating a Data Breach

You are a cybersecurity student tasked with investigating a recent data breach that affected a major organization. Your goal is to gather reliable, up-to-date information about the cause of the breach, affected systems, and security measures taken afterward.

Assignment Tasks:

1. Use Google Advanced Search (intitle:, filetype:pdf, site:.gov) to find official reports or government-issued cybersecurity advisories related to the data breach.
2. Apply Boolean logic to retrieve technical reports while filtering out news speculation (e.g., "(Company Name AND Data Breach) NOT Rumors").
3. Cross-check information from at least three sources (e.g., cybersecurity blogs, government cybersecurity agencies, and company press releases) to ensure accuracy.
4. Conduct a bias analysis: Did different sources present the same event differently? How can you identify misleading or exaggerated claims?

What students learn: Technical research methods, fact-checking cybersecurity reports, and recognizing bias in security news.

Final Deliverables & Student Expectations

- Students select one case study based on their interest.
- They submit a 1-2 page report including:
 - Step-by-step search process (which operators, filters, and tools they used).
 - Sources found & evaluation of credibility.
 - How search bias affected results (if applicable).