

101ΓΥΥΚ ΑΓΓΛΙΚΑ ΤΕΧΝΙΚΗ ΟΡΟΛΟΓΙΑ

Academic year: 2024-25

Instructor: Chrysoula Lazou

Assignment 1 - 30% (project-based)

Main aim

The main aim of this assignment is to collaboratively create an infographic on a Computer Science topic using at least three academic sources. The infographic will visually present key information on the chosen topic and be supported by a written report. Both the infographic and the report will demonstrate a deep understanding of the subject matter, clear communication, and academic rigor.

Objectives

- Collaborative Learning: Encourage teamwork by having students work in groups to research and create an informative infographic on a Computer Science topic.
- Research Skills: Develop students' ability to locate, evaluate, and synthesize
 information from academic sources, with a focus on applying scholarly
 knowledge to practical outputs.
- **Visual Communication:** Enhance students' ability to convey complex ideas clearly and effectively through visual mediums like infographics, using design principles and digital tools.
- **Critical Thinking:** Foster the ability to distill and prioritize essential information from broad topics, selecting the most relevant aspects to communicate to an audience.
- **Academic Writing:** Improve students' academic writing in English by requiring a clear, well-organized report that explains the infographic, with appropriate citation and referencing in APA 7th edition.
- Presentation and Public Speaking Skills: Build students' confidence and competence in presenting their work and responding to questions from peers and instructors in a professional manner.
- Peer Review and Feedback: Promote a classroom environment of peer learning by encouraging students to engage in discussions, offer constructive criticism, and answer questions about their projects.
- **Digital Literacy:** Develop skills in using digital tools for both research and creation, and become proficient in platforms for media creation and collaborative sharing.
- Application of Computer Science Concepts: Deepen students' understanding of key Computer Science topics through focused research and creative representation of the information.

Instructions for Creating an Infographic and Report on Computer Science Topics

1. Group Formation and Topic Selection

- Each group should consist of **three students** (except for cases approved by the instructor).
- Choose a topic within **Computer Science/Informatics** that interests your group (e.g., Artificial Intelligence, Virtual Reality, Augmented Reality, Cybersecurity, Blockchain, etc.).
- Complete the <u>form</u> stating the names of your colleagues and your chosen topic.
- **Approval:** Submit your chosen topic to the instructor for approval before beginning the research.

2. Research and Sources

- Conduct thorough research and select **at least three academic sources** (e.g., peer-reviewed journal articles, conference papers, textbooks, etc).
- Use credible databases such as **IEEE Xplore**, **Google Scholar**, **ACM Digital Library**, or your university library.

3. Infographic Creation

- The infographic should visually present the key concepts of your topic in a concise and engaging manner.
- Include the following elements:
 - o **Title** of the infographic.
 - Visual representations (charts, graphs, icons, etc.) to communicate data and key points.
 - o Key findings from your research.
 - o A section summarizing real-world applications or future trends.
 - o Properly cite the sources within the infographic using APA7 style (include a reference list at the bottom or in a small section).

Tools for Infographic Creation:

- Use tools like **Canva**, **Piktochart**, **Venngage**, or **Adobe Spark** to design the infographic.
- Once completed, upload the infographic to the Padlet created by the instructor.

4. Collaborative Work

- **Delegate tasks** within the group.
- Work **collaboratively** throughout the process, ensuring that every group member contributes to both the infographic and the report.

5. Report Writing (600-1000 words, APA7 Style, Appendix is excluded from the word count)

• Write a report based on your infographic, expanding on the key points but providing more depth and context.

Report Structure:

1. Introduction

- Introduce the topic and its significance in the field of Computer Science.
- Briefly state the objectives of the infographic and what it aims to convey.

2. Research and Analysis

- o Discuss the academic sources you used.
- o Explain the key findings and how they relate to the infographic.
- o Provide an analysis of any **data or trends** presented.

3. Visual Representation

- o Justify the design choices made for the infographic.
- o Explain how the visuals enhance the understanding of the topic.

4. Real-World Applications

- o Provide examples of how the topic is applied in real-world settings.
- Discuss any potential future developments or challenges related to the topic.

5. Conclusion

 Summarize the key takeaways from both the infographic and the report.

6. References

7. **Appendix** (attach the infographic and write a paragraph reflecting on the collaboration process and each member's contribution).

Formatting:

- Use **APA7 style** for formatting your report, including **in-text citations** and the **reference list**.
- Double-space your text, use a **12-point font** (Times New Roman or Arial), and include **page numbers**. An APA 7 guide (Cheat Sheet) will be attached.

6. Submission Requirements

- Submit the **infographic** in PDF format HERE.
- Submit the **report** as a separate Word document (Moodle platform). The cover page should include the names and registration numbers (student ID) of all group members. Only one member of each group submits the report.
- **Deadline:** 24/11/2024
- Presentation dates (TBA)

7. Assessment Criteria

Your group will be assessed on:

- Research quality and the credibility of your sources.
- Clarity and effectiveness of the infographic.

- Collaboration and group effort.
- Quality of the written report (coherence, APA style, depth of analysis).

 Quality of the presentation, ability to answer questions, and engagement with the audience.