

Computer Fundamentals and Ethics
CSE 1100
Topic: Software
Open-ended Assignment for 2024 series

Assignment Title: Creative Software Concept and Licensing Analysis

Background:

Software is built to solve real-world problems, but not every need has been addressed yet. This assignment encourages you to think creatively about **a new software solution** that would be helpful in your daily life — either personal, academic, or professional — but is not yet available or fully developed in the current market.

Objective:

- Apply knowledge of software classification and licensing
- Develop software design thinking
- Demonstrate analytical and justification skills
- Explore real-world applications of software concepts

Assignment Task:

Imagine a daily problem or inefficiency you face and propose a software that could solve it. Your task is to describe and classify this software based on several perspectives.

Instructions:

Your response must include the following sections:

I. Features and Specifications of the Proposed Software (7 marks)

- **Purpose:** What problem does it solve?
- **Target Users:** Who will use it?
- **Core Features:**
 - List **5–7 key features** (e.g., UI, automation, security, integration).
- **Technical Specs:**
 - Platforms (Windows, Android, etc.)
 - Technologies used (optional)
- **Justification:** Why is this software needed? How is it different from existing tools?

II. Type of Software (6 marks)

Classify and justify the software in these 3 categories:

1. **System or Application software** – Is it supporting the system or providing user functions?
2. **Freeware, Shareware, or Commercial software** – Will it be free, trial-based, or paid?
3. **Open-source or Closed-source** – Will others be able to access and modify the source code?

Provide **justifications for each choice**, based on the intended users, business model, and sustainability of your software.

III. Software Licensing (5 marks)

- Choose one **license model** that fits your software:
 - **Public Domain**
 - **Permissive (MIT, BSD)**
 - **Copyleft (GPL, AGPL)**
 - **LGPL**
 - **Proprietary**
- **Explain why** you chose this license:
 - Will your software be collaborative?
 - Is your goal profit or community development?
 - How does licensing affect maintenance and security?

IV. Presentation, Format, and Clarity (2 marks)

- Submit your assignment in a **well-formatted PDF file** [Example: RollNo.pdf]
- Use **headings, bullet points**, and if needed, **mockup sketches**
- Keep your writing **clear, logical, and concise**

Deadline: [Scheduled date of your board viva voce]


Strict Guidelines on Plagiarism and Use of Web Resources

Original Work Only – Zero Tolerance Policy

1. **All parts of this assignment must be your own original thinking and writing.** Copying from classmates, books, websites, AI tools, or any digital sources (fully or partially) is strictly prohibited.
2. **Do not copy-paste from the web-** including blogs, forums, Wikipedia, ChatGPT, or any coding websites. All ideas must be **expressed in your own words** even if you take inspiration.
3. **Do not use AI-generated answers without critical thinking and rewriting.** Any submission that reflects full or partial AI-generated content without proper understanding will receive **zero marks**.
4. **All submissions will be checked for plagiarism** using detection tools. Any similarity above **15%** (excluding references) will be considered **academic dishonesty**.
5. **Group discussion is allowed**, but your write-up must be individually done. Identical answers between students will result in **zero marks for all involved**.
6. **If you refer to any source, it must be cited** properly in your own words. Use basic citation format (e.g., Author, Website Name, Year).

Violation Consequences:

- First violation: **Zero on the assignment** and warning
- Repeated violation: **Reported to the department for disciplinary action**

 Rubric Table (Total: 20 Marks)

Criteria	Excellent (Full Marks)	Good (Partial Marks)	Needs Improvement	Marks
1. Features and Specifications (7 marks)	Clearly defined purpose, target users, ≥5 relevant features, strong justification, and clear tech specs	Somewhat clear; missing 1–2 features or weak justification	Vague purpose/features, lacks clarity or specs	/7
2. Type of Software (6 marks)	All 3 types identified accurately with solid justifications	Identifies 2–3 types but justification is weak or missing	Incorrect classification or minimal explanation	/6
3. Software License Selection (5 marks)	Correct license selected and fully justified based on goals	License selected but explanation is limited or somewhat unclear	No license selected or poor/no justification	/5
4. Presentation & Clarity (2 marks)	Well-organized, properly formatted, logical flow, within word limit	Mostly clear with minor format or grammar issues	Poorly structured, hard to read or disorganized	/2
Total				/20