

CSE 293 CSE Design Laboratory – Project 5

Realistic Issues for Product Development

DUE DATE: Last Day of Classes

For this project, as a team, you are asked to assess the issues for your project as related to product development and commercialization. Many of your projects are very realistic, and it is vital for you to have an understanding of professional, ethical, legal, security, social, global, economic, and other issues that are relevant if you were to attempt to transition your software from a prototype (such as the CSE293 outcome) to a product.

Since not all projects are created equal, the following is a list of possible issues that can arise in commercialization. Your role as a team is to identify several relevant issues from this list, and for each issue, to write a detailed analysis (3 single-space, 12 point, 1 inch margin pages) on the applicability of that issue to your project.

1. **Funding Issues:** If your final project is a prototype, how would you go about producing commercial-grade software for your project? Will you work on the commercial release gratis? Will you seek external funding? If so, who would you approach; e.g., will you seek a bank loan, a (federal) grant, a (military-derived) contract?
2. **Commercialization Issues:** How would you go about the process of commercializing your project? Would you do so on your own, e.g., by forming a company? Approach a company or venture capitalist? Release an open source or executable evaluation copy? What considerations are there in terms of ownership? How would you price your product? What features would your product need to be commercially viable? Can you estimate the man-hours needed to transition from a prototype to a product? Would you do phase releases? These and many other questions must be addressed.
3. **Intellectual Property (IP) Issues:** Who will own the IP rights resulting from your project? Will you attempt to patent any discoveries or processes? How will you make sure that you do not infringe on existing patents? Did you use university resources? If your instructor provided comments that were then incorporated into your project, would that be a university resource? What arrangements will need to be made with the university if you used university resources?
4. **Ethical/Legal Issues:** Many projects often involve users providing their login identity (user name and password), with the application taking that information and logging on on their behalf to various web services and/or databases. For example, a project that involves a university student with one login being able to access multiple systems, or a project for electronic payment that allows one individual to set up a single password to be used to pay utilities, credit cards, mortgages, etc., all on-line. For this issue, you must consider the ethical and legal issues for your project in this regard.

5. Software Licensing Issues: There are many different models that are emerging in regards to software licensing, including: per user basis, site license, subscription (web and non-web), hosting of data, open source, etc. Will you sell the rights to your system to another firm and receive royalties, or will you market your system directly? You are to review the relevant models and identify the model that is most suitable for your project.
6. Payment Issues: If your project involves selling a product, you must consider payment issues and security by reviewing available commercial products (e.g., for encryption or secure payment) or other security techniques (e.g., Smart Card - see <http://www.smartcardalliance.org>). This should include, in the case of products, the cost associated with using a product or service (e.g., Paypal).
7. HIPAA Security Issues: If your project involves individuals that may have to enter personal information (social security, income data, health care data, etc.), you may have to deal with HIPAA regulations (see <http://www.hhs.gov/ocr/hipaa/> and <http://www.hipaa.org/>). For this issue, you need to research the impact and implications of such issues for your project.
8. Project Specific Issues: In addition to the aforementioned issues, you are welcome to consider other issues that may be specific to your project. Remember, you want to focus on issues related to professionalism, ethics, legality, social responsibility, global impact, political, health and safety, environmental, economic, and other type “real-world” issues that come into play as you seek to commercialize your project. For example, if you are developing a game, you may need to consider societal impact to make sure that the game, its characters, etc., do not disparage any socio-economic-ethnic group.

Each team member must choose one of the issues and write a detailed report on the issue for their project/product. This will include appropriate citations (literature and websites). Aim the discussion at a management level audience.