Requirements Report:
Project title

Name(s) (emails)

1. **Introduction**. Introduce and describe in general terms the background to the system (you are welcome to copy-and-paste from your proposal, if appropriate incorporating the suggestions I provided). Subsections should include:
   - **Background** describes why this new system is built
   - **Expected types of users** of the system, including their experience, expected knowledge, etc.
   - **Contexts of use** that describes the setting and typical situations in which the system will be used
   - **What the system will be used for** briefly describes the general expectations of the system
   - **Constraints** that limit the design, i.e. scoping the project

2. **Requirement gathering**. This is where you provide details on how you gather your requirement. Subsections should include:
   - **Competitive analysis**, this provides a critical analysis of the limitations of the current systems/practices (i.e. the problems that users experience with the current systems/practices – also list the good things, especially if the competitor system is the number one selling product in the market). Provide pictures of competitor's products or the current practices if appropriate, with comments (see Figures 1-2 for example).

Figure 1: The slot to insert money is too low for many users

Figure 2: Illogical payment method (the slot for bills is separated from the slot for coins)

   - **Data gathering method**, this should describe in great detail the method you use (interview, observation, analysis of manuals of competitive products, etc). If you use interviews and/or observations, describe how many people, who they are (age, gender, job/study, Internet/computer experiences, experience using similar products, etc, *but not their names, please*, this course received IRB exemption with the promise of not asking for user names), where and when the interviews/ observations took place, etc. For interview, include questions in the Appendix. For observations provide details on the actual places (e.g., McHenry library, 1st floor)

3. **Requirement analysis**. This is where you provide details on the analysis of your requirement data. Subsections should include:
    - **Personas.** List here several concrete personas. See example in the lecture notes for formatting personas. Please remember that concrete personas have name (not real name), age, job, etc. They also have narrative activity on their daily life, in which the interaction with the system being investigated is a part of it (this is not supposed to be a diary). They also need to have key attributes and key goals in relation to the interaction with the system. Please indicate whether each persona is a typical user, occasional but important or occasional and with special characteristics. Include a description on how each persona was developed and validated.
    - **Scenarios.** List here several concrete scenarios of use. Try to keep them short and to the point (see example below). Each scenario should be accompanied by a paragraph that describes the type of the expected user (e.g., a typical customer), the relative importance of the scenario (e.g. frequently happens and important, infrequently happens but still important, rare and not important, etc), and whatever other nuances you feel should be included. Include a description on how the scenarios were collected and validated.

Scenario of borrowing books in the library → part of requirement gathering for a proposed library self-checkout terminal.
Saul (not real name, see persona 1) is returning 3 books (2 which are overdue) and is going to borrow 8 more books. Joan (not real name), the librarian, starts checking out his holdings. She notices that he has reached the max level of $10 fine. She tells Saul about the fine, and he pays it. After 7 books, she notices that Saul is maxed out on the allowable books. Saul asks if he can check the rest out on his son's account as he happens to have his son's library card with him. She says yes and checks out the last one. Saul then asks if he can renew any books that are almost overdue (in the next week or so). 3 of them are, and Joan renews them for another month.
This scenario originated from the observation at McHenry library on Jan 12, 2008 at 3PM. The scenario was verified by Joan (not real name), the staff at McHenry library. This scenario infrequently happens but important as unpaid fines and people exceeding their borrowing allowance are the two major causes of problems in McHenry library.

    - **Use cases**. List several interaction use cases. Think carefully at the extensions.

Requirement summary. This is where you provide the summary of your functional and non-functional requirements (I expect at least 5 of each). For each requirement, indicate whether it is high, medium or low priority. For each, include justification why it is included. Example:
- *Functional: The system must support cash and card payments for fines (High priority) Reason: some users will not have enough cash and if the system does not allow users to check out books unless the user pays the fine, than alternative payment method to cash payment must be provided*
- *Non Functional: The system must be accessible by users in a wheel chair (High priority) Reason: to be in compliant with American Disabilities Acts.*