

## Project: Requirements Misuse and Abuse Cases

### Overview

This homework will allow you to demonstrate the generation of misuse/abuse cases for ATM system that allows a user to enter swipe their card and enter a pin. Then they can check balances, withdraw funds, deposit and transfer funds.

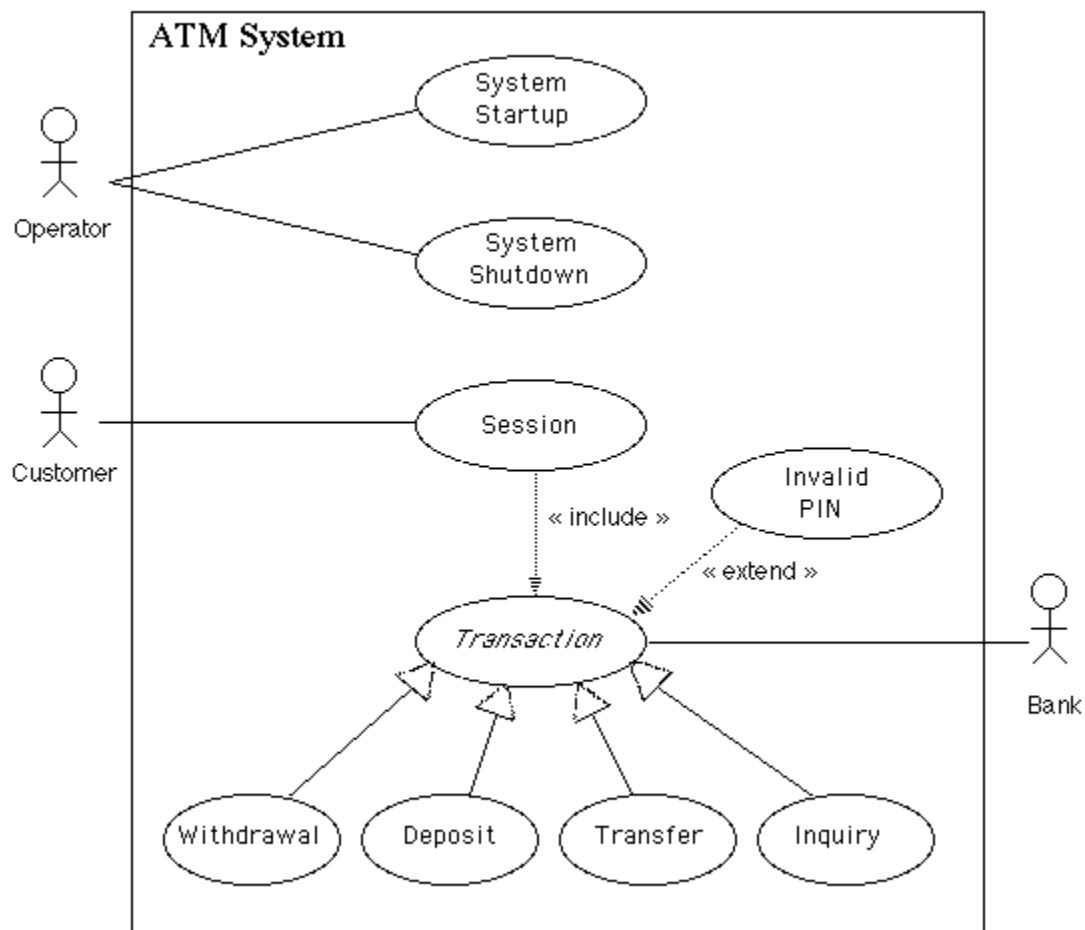


Image Reference: <http://www.math-cs.gordon.edu/courses/cs211/ATMExample/UseCases.html>

In addition, you will investigate the use/misuse of PII data. As mentioned in the NIST SP800-122 document, PII data can be used to distinguish an individual or to identify an individual. Some examples of information that could identify an individual include, but are not limited to, name, passport number, social security number, or biometric data.

### Assignment Details

Your assignment includes two parts: ATM abuse/misuse case and PII research.

#### **ATM abuse/misuse case:**

This week several documents were provided that described the requirements elicitation and gathering process. Several techniques were listed for gathering security requirements including misuse/abuse cases, general processes, attack patterns and architectural risk analysis. For this assignment we focus on misuse/abuse cases.

Although, you can use UML diagrams to document use case and misuse diagrams, for this effort, we will use text demonstrating the flow of the misuse case. Using the flow as described above and the information provided in this week's reading on misuse cases, describe possible misuse cases for a typical ATM application.

You should include a description of possible mitigations for threats and attacks.

#### **PII research:**

Based on your readings from this week, find several examples either online in your daily lives (forms you have to complete) where possibly more information is gathered and stored on you than is needed. Describe PII data and provide specific examples and list the PII data that is gathered. Discuss why this is an issue and possible ways you can mitigate these issues. If you worked for the vendor, how could you mitigate these issues? For example, sometimes a vendor may have the option to not store your credit card or your personal information. Show screen shots of the vendors who are collecting this data where possible.

#### **Deliverable**

You should create a word or PDF document with a detailed description of the possible misuse/abuse cases as well as the possible mitigations and the results of your PII research. The document should be well-written and include references for all sources you used support your work. Be sure to include your name, date and course number on the document in the title page. Note: One well-organized document with both parts of the assignment should be submitted. Page numbers should be included on each page of the document.

#### **Grading Rubric**

<b>Attribute</b>	<b>Meets</b>	<b>Does not meet</b>
ATM abuse/misuse case	<b>40 points</b> Describes possible misuse cases for a typical ATM application based on the provided UML diagram.  Includes descriptions of possible mitigations for threats and attacks.	<b>0 points</b> Does not describe possible misuse cases for a typical ATM application based on the provided UML diagram.  Does not include descriptions of possible mitigations for threats and attacks.

PII research	<p><b>40 points</b></p> <p>Contains several examples either online in your daily lives where possibly more information is gathered and stored on you than is needed.</p> <p>Describes PII data and provide specific examples and list the PII data that is gathered.</p> <p>Discusses why this is an issue and possible ways you can mitigate these issues.</p> <p>Discusses how you could mitigate these issues, if you worked for the vendor?</p> <p>Includes screen shots of the vendors who are collecting this data where possible.</p>	<p><b>0 points</b></p> <p>Does not contain several examples either online in your daily lives where possibly more information is gathered and stored on you than is needed.</p> <p>Does not describe PII data and provide specific examples and list the PII data that is gathered.</p> <p>Does not discuss why this is an issue and possible ways you can mitigate these issues.</p> <p>Does not discuss how you could mitigate these issues, if you worked for the vendor?</p> <p>Does not include screen shots of the vendors who are collecting this data where possible.</p>
Documentation	<p><b>20 points</b></p> <p>Document contains minimal spelling and grammar errors.</p> <p>Document includes page numbers.</p> <p>References included using APA style.</p> <p>Title page includes Name, date and course number.</p> <p>Document includes both ATM and PII research components.</p>	<p><b>0 points</b></p> <p>Document contains multiple spelling and grammar errors.</p> <p>Document does not include page numbers.</p> <p>References were not included.</p> <p>Title page missing or did not include name, date and course number.</p> <p>Document does not include both ATM and PII research components.</p>