# **Threat Model**

### 1.1 Threat actors

Threats such as organizations or random people that could threaten the application are:

- Anonymous people who intend to wrongly locate someone's confidential information from within the application.
- Various viruses, damaging malware which targets the operating system and general worldwide web threats.
- clients of the application who intend to alter the system incorrectly.
- People who are anonymous and wish to change or delete various information.

# 1.2 Assumptions

- The user will not require any assistance from an admin
- The user will remember his or hers full account number
- The device the user is using is safe

### 1.3 Trust Boundaries

- Application device: The device that is currently running the console application.
- Application users: The users who is trying to gain access to the application

### 1.4 Treat Assessment

I D	Category	Trust Boundary	Threat Description	Action	Action Description
1	Spoofing	Application users	attackers with malicious intent could change sensitive data	Mitigate	All the sensitive will be protected requiring the account number that only the user should have to access them and only then they reveal themselves.
2	Tampering	Application device	attackers could have used reflection to gain access to personal data	Mitigate	"[assembly: System.Runtime.CompilerServices. DisablePrivateReflection]" Added to disable foreign threats from being able to reflection Added sealed to every class that inherits from bank account in an attempt to

					address the security issues that arise from inheritance in c#
3	Tampering	Application device	Attackers could have exploited the use of inheritance in some classes and gained access to sensitive data	Mitigate	Added sealed to every class that inherits from bank account in an attempt to address the security issues that arise from inheritance in c#
4	Repudiation	Application device:	Users modify or create new data then deny doing so	Mitigate	Log when a user signs in, log when he withdraws, log when he deposits
5	DOS	Application device	Malware consumes all of the accessible resources found on the device	Transfer	The operating system combined with the antivirus will manage this issue

# 1.5 Treat Model Diagram

