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CS7NS5-Security and Privacy

Assignment 1: Security and Privacy considerations.

# Dissertation abstract

The dissertation is being done under the guidance of Professor Glenn Strong. The topic being exploring the possibilities about recommender systems in education on a Technology Enhanced Learning (TEL) platform *Scratch [1]*. *Scratch* was developed at MIT media labs to help young people develop their critical thinking and reasoning skills. Scratch is also aiming at people who are new to programming to get them started with their creativity thinking. With Scratch, one can program interactive stories, games, and animation. It also provides a collaborative platform through which students can share their own code and develop on others work. Scratch is also being used in more formal education by teachers to introduce programming concepts to inexperienced users

The research aims at studying the improvements in users learning experience by building a recommender system based on the public datasets available.

Recommender system is a kind of adaptive system that’s learns based on users interactions with the system over time.

In this paper we discuss the security and privacy considrations in such systems.

# Threats

Attackers who cannot be quickly distinguished from general users can introduce biased information and data in an effort make the system forcefully adapt to their advantage.