

# Computer Security and Privacy (COM-301)

Week 1: Basic Concepts

Practice Problem Set

## The app of your dreams



Based on a recommendation from a friend, you have recently installed a new app on your phone that allows you to pre-order drinks at Satellite to avoid long queues on busy nights. The app is connected to your CAMIPRO account so that, once you have ordered the drinks through the app, your order is directly paid for from your account. Access to the app is password-restricted and each user can choose their own password when they first register.

Describe a **security threat** to this system, a **potential vulnerability** of the system in relation to this threat, and the **harm** that could result from a successful attack within this threat model. Propose an additional **security mechanism** that the developers should implement to minimise this threat.

Example of correct answers:

Security threat -> A friend could learn my password and get access to my phone, and therefore could access my app

Vulnerability -> Weak PIN, easy to eavesdrop when ordering a drink. Phone might be on the table and easy to steal

Harm -> The friend is able to order a drink using my money

Security mechanism -> For example: biometric check when ordering (faceID) or 2FA (show camipro when getting drink)