## Worksheet Class 1: Protocols and Layering

## **Discussion Question 1: Protocol Structure (~15 minutes)**

Alice and Mila are Swatties starting out their semester and are roommates. Alice wants to give Mila a reminder to get milk.



## 1. Structure of the message:

- Construct the message that Alice posts to Mila. (Example on class slides)
- Other than the sender/receiver information, what other metadata about the message might you add?

## 2. Organizing a drop-off point.

• Who chooses the drop-off point?

3. Write a protocol to write a note /post—it to your housemate. A protocol defines the message format and the transfer procedure.

Alice moves to Chicago and Mila to Seattle for summer internships. Alice wants to send Mila a birthday card. Think of this as filling two different pieces of information (1. the birthday card, 2. the mailing envelope).
1. Construct the message and header portions. Have these changed from the previous scenario?
<ul> <li>2. List the message format and transfer procedure of the "mail sending protocol" that Alice uses.</li> <li>a. Who chooses the drop-off point?</li> <li>b. Is this the only protocol used by Alice to deliver mail to Mila?</li> </ul>
<ul> <li>3. Message transportation and delivery. Whose job is it to:</li> <li>a. choose the carrier?</li> <li>b. plan the route?</li> <li>c. deliver the message?</li> <li>d. ensure the message is not lost?</li> </ul>