

# Privacy by Design: The Game

College of Information Studies, University of Maryland  
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<https://evidlab.umd.edu/privacy-by-design-the-game/>

A large, dark blue, triangular shape that points upwards from the bottom left towards the top right, occupying the lower half of the slide.

# Agenda for Today

## Today

- Introduce the Privacy-by-Design research project
- Discuss the game and objectives
- Play Privacy-by-Design: The Game
- Debrief
- Feedback
- Questions

# The Project

- Funded by the National Science Foundation (SES-1449351)
- Research: Discovering factors that encourage discussion or actions on ethical challenges
- Goal: Incorporate findings into curricular materials
  - Interactive Simulations
  - Board Games
- Classroom Activity on Thursday:
  - Play Privacy by Design Board Game in Class
  - Debrief
  - Complete 2 minute survey



# Participating in the Research

## Procedures

- You will role-play a member of a technology design team and design a privacy policy during the board game
- Following game play, you will complete a 2 minute survey on your phone or laptop

## Consenting to the research

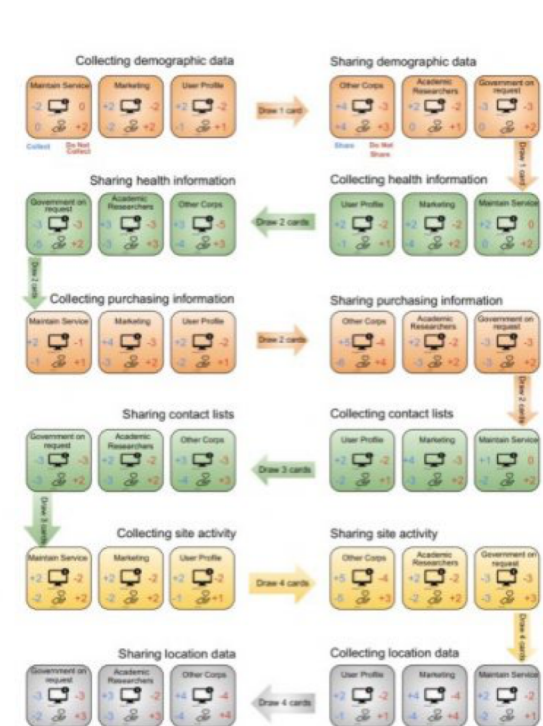
- If you consent to the research project, we will use your survey data in our analysis
- If you do not consent to the research project , we will not use your data in our analysis





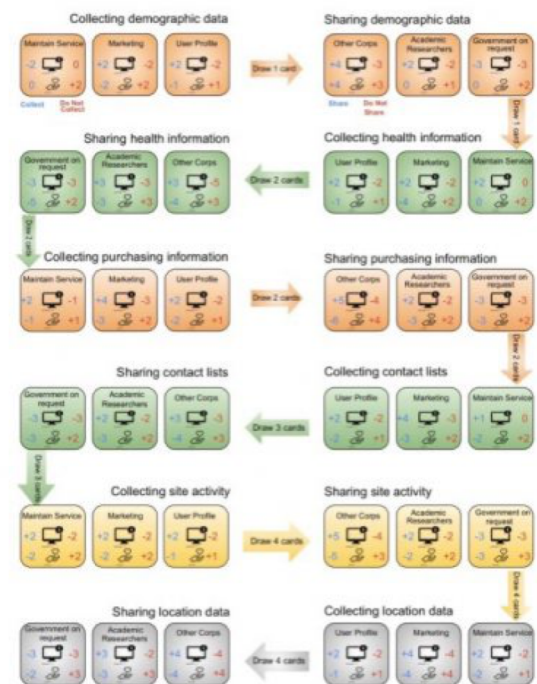
# Privacy-by-Design: The Game

- **Scenario:** Your team works at a health company that is building a Glucose Monitoring App for users to monitor their glucose levels
- **Objective:** Design an app policy with two types of decisions:
  - What data to collect for the app
  - What data to share from the app
- Each decision has a cost
  - Developer Resources (do you have the money, people, or time to make the app?)
  - User Trust Resources (does the general public trust your app or company with their data?)

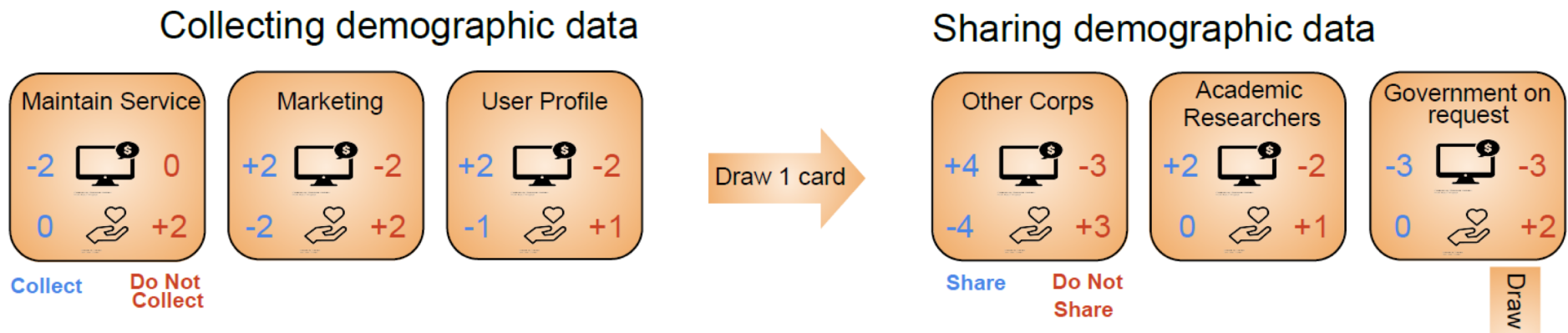


# Privacy-by-Design: The Game

- **Roles:** Three roles with different objectives
  - Project Manager (2)
  - Mobile Developer (2)
  - User Experience Researcher (2)
- Select role to role-play during the game
- **How to play:** Move through each tile, discuss the decision as a team, and make a decision whether to collect or do not collect data AND whether to share data or do not share data
  - Keep track of the cost of your decisions
  - If you lose all 20 Developer Resources or 20 User Trust Resources, the team loses!



# How to read the board



- The board starts on the the top left square tile
- Follow the tiles and arrows to move through the board.
- Each line on the board represents a particular kind of data. For example, the tiles on the first line all refer to “demographic data”, while all tiles on the second line refer to “health information.”
- Important: if you do not collect data at any point, you cannot share data at anypoint

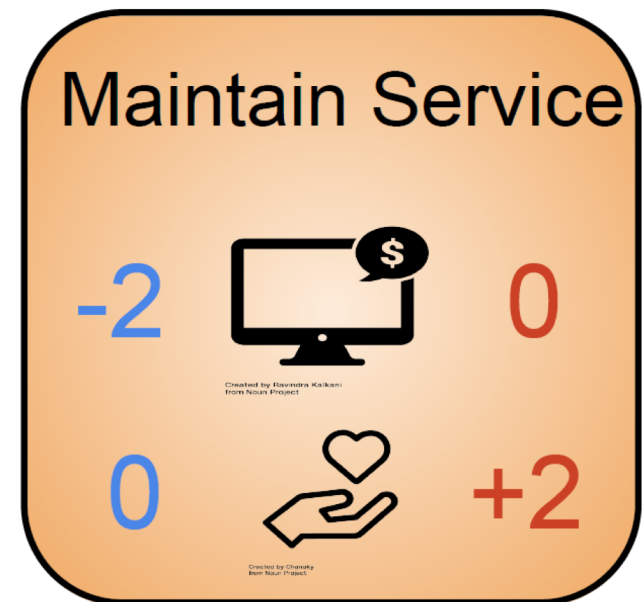
# How to read the square tile

Each square requires you to make a decision on a particular use for that kind of data

- The text represents how you will use that data
- The computer image represents developer resources
- The hand with a heart represents user trust
- Left or blue side is the decision to collect
- Right or red side is the decision to not collect

Thus, would you like to collect data to maintain the service of the application?

- Collect (-2 Developer Resources, +0 User Trust)
- Do Not Collect (+0 Developer Resources, +2 User Trust)

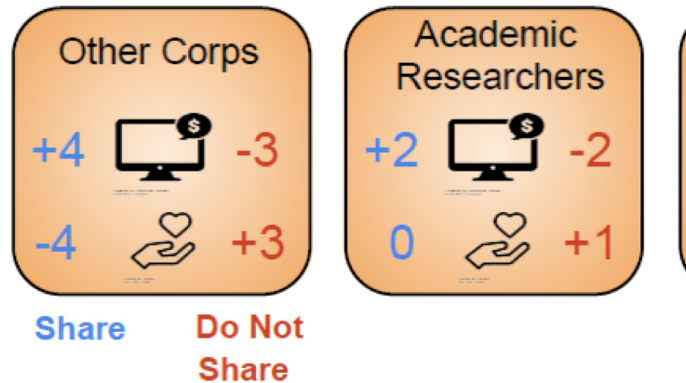


**Collect**

**Do Not  
Collect**

# Short quiz on reading the board:


## Sharing demographic data



- What kind of data am I sharing?
- On the first tile, who am I sharing the data with?
- What does the computer represent?
- What does the hand with the heart represent?
- I decided to not share demographic data with Other Companies. How many developer resources do I lose? How many user trusts do I gain?

# Event Cards

- Arrows prompt you to draw event cards that represent real-life scenarios that affect app development
- They can affect decisions the team has already made AND affect decisions the team hasn't made yet
- When prompted, draw one event card at a time and follow the directions
- Adjust the score or board accordingly



**Guidelines Change**

The App Store released new, more restrictive, app review guidelines.

Past decision: Lose 3 developer resources if you shared contact lists with anyone.

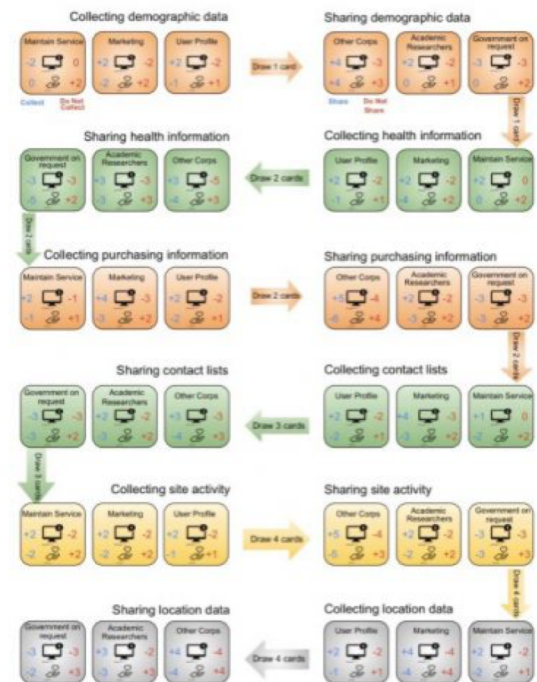
**-- Or --**

Future condition: Contact lists cannot be shared with anyone. When you reach contact lists, you must decide not to share.

# Reminders before starting the game

- Select your role and have fun role-playing
- The team must reach a consensus on each tile before discussing the next the tile
- Keep count of your costs after every decision
- If you reach 0 Developer Resources or 0 User Trust Resources, your team loses the game
- On event cards, pay attention to whether it references a Past or Future decision

Questions?



Take the white scrap paper, and write the following to start

SCORE

Developer Resources (20)

User Trust (20)

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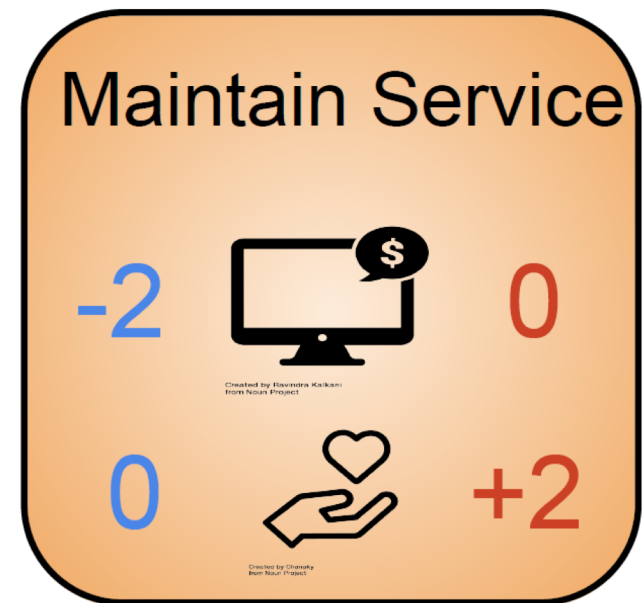
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**Do Not  
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# Glossary for the Tiles

**Maintain Service:** data you need to make the app's basic functions run

**Marketing:** data you need to increase the public's awareness of your app

**User Profiles:** data you need to determine categories of users, to predict their behavior, and tailor their experience

**Other Companies:** private companies that may want to pay access to the data you decide to collect

**Academic Researchers:** researchers that may want to access data to further their research

**Governments:** may request - or demand - access to your data, for instance to solve crimes

# Debrief Questions

- What was the most difficult decision? Why?
- How did roles play into your team's decisions?
- How did the user play into your team's decisions?

