

## CDA4010 Human Factors and Collaborative Computing

### Assignment 3

Value: \$2,500.00

In an attempt to ride the wave of the hugely successful and popular mobile game, Pokémon Go, the CEO of Unfinished Business wants to launch a new mobile game, Nomékop Go. The Interaction Design team has proposed two interfaces (codenamed Sun and Moon, respectively) to allow users to interact with the mobile game. As the Interaction Design intern, the CEO has asked you to assist the design team with developing a study to determine which of the two interface (Sun or Moon) is the most useful and accessible interface for the new game.

- Goals of the Nomékop Go Interface Study
    - Formal Goals
      - Users can efficiently interact with the interface to complete a task
      - Users can complete a task without committing any errors
      - Users can safely play the game using the interface
    - Informal Goals
      - Users like the color scheme of the interface
      - Users like the control layout of the interface
  - Triangulation of the Nomékop Go Interface Study
    - Data triangulation
      - Two participant populations will be selected for each interface (a total of 4 population groups)
    - Methodological triangulation
      - Data is collected by the application while participants complete tasks within the game
      - Data is collected by the investigators through participant interviews and questionnaires
1. For **participant selection**,
    - A. Select a general type of sampling to use to select participants
      1. Explain the advantages and disadvantages of the selected general sampling type
    - B. Select a sampling method (related to the general type of sampling) to use to select participants
      1. Explain the advantages and disadvantages of the selected sampling method
    - C. Describe the purpose of the **informed consent form**
      1. Explain the advantages of employing an informed consent form during the study
  2. For **data collected by the application**,
    - A. Describe at least **three** forms of data the application can collect (be specific)
      1. Refer to the **Usability Goals** in **chapter 1**  
Note: The application can't collect data on safety, learnability or memorability
    - B. For each form of data listed above,
      1. Explain how the application can collect and/or store the data
      2. Explain how the data can validate or improve the application
      3. Identify any concerns regarding how the data is collected  
Note: Example concerns include data type, format, accuracy, etc.

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3. For **data collected by the investigators**,
  - A. Describe at least **three** forms of data the investigators can collect (be specific)
    1. Refer to the **Usability Goals** and **User Experience Goals** in **chapter 1**  
Note: The investigators can collect data on safety, learnability or memorability.
  - B. For each form of data listed above,
    1. Explain how the investigators can collect the data  
Note: Refer to the **Types of Interviews** and **Questionnaires** discussed in **chapter 7**.
    2. Explain how the investigators can record the data
    3. Explain how the data can validate or improve the application
    4. Identify any concerns regarding how the data is collected  
Note: Example concerns should address the introduction of bias that could skew the data.
4. The CEO also wants to know if the design team should conduct a **Pilot Study**
  - A. Describe the purpose of a pilot study
  - B. Explain at least **three** advantages to conducting a pilot study
  - C. Describe any consequences that could result from not conducting a pilot study
  - D. Identify any concerns regarding the pilot study  
Note: Example concerns should address the introduction of bias that could skew the data.

Write your report using a **research paper format**. The word count for the report must be greater than 1000 words, but less than 3000 words. The paper should be presented in a clear, well-written and logical manner. The paper should be written in a format compatible with Microsoft Word.