

# CS 615 User Interface Design – User/Task/domain Analysis

## Group details:

Members:

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Group name: Canvas

## User analysis:

Synopsis of interviews with different user classes:

1. We interviewed a boy who is new to board gaming. In the interview, it became clear that his primary goals revolved around finding games that suited his preferences, exploring the world of board gaming, and improving his skills for game nights with friends. His main frustrations resulted from the financial commitment and uncertainty of buying games he might not enjoy. He sought a solution that would allow him to try out different games without the burden of purchasing them.  
The concept of a board game rental website greatly appealed to him, as it would provide a convenient and cost-effective way to explore various board games. His concern about feeling like a novice during game nights with friends highlighted his desire to be well-prepared and confident. His main concerns centered on user-friendliness, convenience, and beginner-friendliness in board games, indicating a need for accessible and easy-to-grasp gaming experiences.
2. We interviewed a mid-aged man who is married and has two children. He was determined to enhance the family's bonding experience and draw his two children, aged 8 and 10, away from the captivating screens that often consume their attention. While he recognizes the educational and recreational value of board games, he faces several challenges in buying them. The costs can quickly add up, making it financially impractical to continuously purchase new games. Furthermore, predicting which games will connect with his children is uncertain, and the clutter of accumulated games poses a storage challenge. In the interview, he highlights these obstacles, emphasizing the need for a more cost-effective, diverse, and convenient solution to introduce his family to the joys of board gaming and quality family time.
3. We interviewed a teenage girl who really loves playing board games. In the interview, her passion for board gaming and her desire to host budget-friendly game nights with friends, explore new board games, and create vlogs of her gaming experiences were evident. Her primary frustration was the affordability of board games, given her limited pocket money. She expressed a strong desire to afford more games within her budget and find new games to enrich her gaming experiences. The interview revealed an opportunity to address these frustrations and needs on the board game rental website.

Key insights from the interviews:

- User-friendliness, convenience, and beginner-friendliness in board games are a few main concerns, indicating a need for accessible and easy-to-grasp gaming experiences.
- Importance of ensuring an enjoyable experience while simultaneously adhering to a budget-friendly approach.
- There is a strong desire to uncover a variety of board games that yet again aligns with a budget-friendly approach.

Personas for the potential users are attached below.

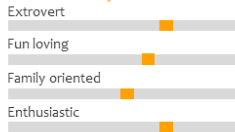
## Casual gamer, Cho



'Just get through the weekdays'

Name: Cho Chang  
Age: 26  
Education: Bachelors in CS  
Profession: Engineer  
Location: Boston, MA  
Gender: Female  
Physical limitations: None

### Personality



### Goals

- Rent a variety of board games quickly and easily for weekends.
- Chance to try out new games before buying one.
- Find and explore new and popular board games in her favorite categories.
- Spending less money on games.

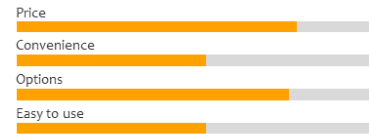
### Frustrations

- Spending a lot of money on board games
- May unlike new games bought
- Limited space in apartment to store multiple games for long
- Reselling after buying a game

### Bio

She loves playing classic board games with her friends. Despite her busy life and work, she enjoys the strategy and fun of board games. She believes they're a great way to relax with friends and make lasting memories. In her free time, she explores local game shops for new games to share with her friends. She may be a casual gamer, but she values the moments of fun and connection with her friends through games.

### Motivations



### Communication pattern

- ☒ Text message
- ☒ Email
- ☐ Mail

### Characteristics

Domain experience: High

Computer experience: High | Tech savvy

Factors distracting: Work responsibilities

Relationships: Active in social circles

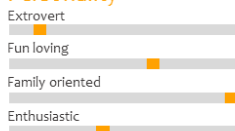
## Family focused, Fred



'I love my kids'

Name: Fred Weasley  
Age: 42  
Education: College educated  
Profession: Grocery store owner  
Location: Boston, MA  
Gender: Male  
Physical limitations: None

### Personality



### Goals

- Find games with clear instructions and age-appropriate content.
- Discover new board games suitable for family play.
- Limit excessive screen time of his children.
- Use educational board games to make learning fun for his kids.
- Organize frequent family game nights to bond with his children.

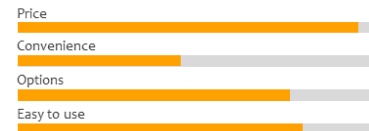
### Frustrations

- Spending a lot of money on single game
- Limited free time, due to work and marital responsibilities
- Finding games that are suitable for both children and adults' enjoyment.
- Kids get bored of limited game purchases

### Bio

Fred's home is filled with laughter, and family game nights are a cherished tradition. He values the quality time spent with his wife and children, seeing board games as a way to strengthen their relationships and teach valuable life lessons. He's always on the lookout for new and exciting games that his family can enjoy together.

### Motivations



### Communication pattern

- ☒ Text message
- ☐ Email
- ☒ Mail

### Characteristics

Domain experience: Limited

Computer experience: Basic

Factors distracting: Family responsibilities

Relationships: Married with 2 kids

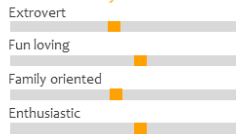
# Newbie gamer, Neville



'One game at a time'

Name: **Neville Longbottom**  
Age: **22**  
Education: **College Student**  
Profession: **NA**  
Location: **Dorchester, MA**  
Gender: **Male**  
Physical limitations: **None**

## Personality



## Goals

- To gradually expand his knowledge and collection of board games.
- To find affordable and beginner-friendly games that suit his tastes.
- To achieve a balance between academics, social life, and his newfound passion for board gaming.
- To become a confident gamer and contribute to game nights with friends.

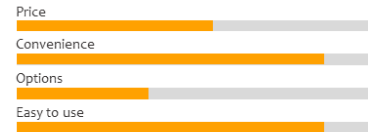
## Frustrations

- Balancing board gaming with college assignments and social activities.
- Feeling like a newcomer among friends who are experienced gamers.
- A limited budget as a college student for buying new games.
- Feeling lost with so many games to choose from.

## Bio

Neville is excited to join his college friends who are experienced gamers in their game nights. He loves how board games are simple yet great for relaxation and socializing. Even though he's new to board games, he sees it as a chance to learn and make friends.

## Motivations



## Communication pattern

- ☐ Text message
- ☒ Email
- ☐ Mail

## Characteristics

Domain experience: **Limited**

Computer experience: **Moderate**

Factors distracting: College course work

Relationships: Single, lives with friends

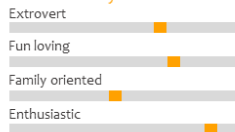
# Admin Boss, Bellatrix



'Let's go full house but empty'

Name: **Bellatrix Lestrange**  
Age: **32**  
Education: **Bachelors in BA**  
Profession: **Retail game store owner**  
Location: **Boston, MA**  
Gender: **Female**  
Physical limitations: **None**

## Personality



## Goals

- Streamline inventory operations by effortlessly adding new board games, efficiently editing game details, and seamlessly removing items when needed.
- adopt user-friendly software solutions that can help automate various aspects of her business, like customer communication, and website maintenance.

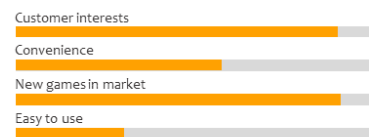
## Frustrations

- Manual tracking of the inventory.
- Manage customer requests.
- Balancing her work with family life and maintaining a competitive edge in the board game rental industry.

## Bio

Bella is a passionate board game enthusiast and a small business owner with a good understanding of the board game rental industry. She is motivated to provide the best possible experience for her customers and seeks software solutions that can help her efficiently manage her business while accommodating her busy lifestyle. Clear communication and user-friendly software are essential for her success in running 'Board for Bored'.

## Motivations



## Communication pattern

- ☒ Text message
- ☒ Email
- ☐ Mail

## Characteristics

Domain experience: **Moderate**

Computer experience: **High**

Factors distracting: Maintaining store

Relationships: Married

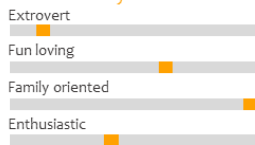
# Enthusiastic gamer, Emma



'What to play this weekend?'

Name: Emma  
Age: 17  
Education: **Highschool**  
Profession: **NA**  
Location: **Boston, MA**  
Gender: **Female**  
Physical limitations: **None**

## Personality



## Goals

- Explore every new board game.
- Host budget friendly game nights with friends.
- Vlog the boardgame experience.

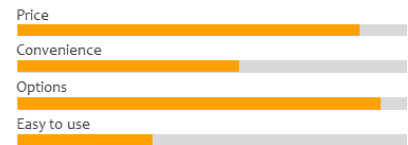
## Frustrations

- Limited time for gaming due to high school studies.
- Balancing gaming with homework and family time.
- Struggle to afford new games on a teenagers' allowance.

## Bio

She loves board games. She's known for her strategic thinking and dreams of designing games someday. In her free time, she plays and invents board games, improving her creativity and problem-solving skills. Emma enjoys various types of games and often plays with friends. Emma lives with her supportive parents who share her love for board games. They encourage her passion and enjoy playing together as a family, recognizing the fun and learning that comes with it.

## Motivations



## Communication pattern

- ☒ Text message
- ☒ Email
- ☐ Mail

## Characteristics

Domain experience: **High**

Computer experience: **High** | Digitally adept

Factors distracting: College social events

Relationships: Single. Lives with parents

## Task Analysis:

Tasks for Board Game Rental Management:

- Login/logout that includes the necessary validation.
- Feedback and reviews system.
- Create an admin page to manage inventory.
- Search and browse the board games.
- Booking and reservation system.
- Manage user accounts and profiles.

High level tasks:

Goal (Admin user):

- Manage the inventory by adding new board games, updating the necessary information about the existing board games, and discarding the outdated or surplus board games from the inventory.
- Once the customer returns the game, update the order as 'returned'.

### 1 Inventory management.

#### 1.1 Add new board games.

##### 1.1.1 Add game details.

###### 1.1.1.1 Enter the title.

###### 1.1.1.2 Enter the description.

###### 1.1.1.3 Enter the game rules.

##### 1.1.2 Enter the game categories.

##### 1.1.3 Add images of the game.

##### 1.1.4 Enter the rental price for the game.

##### 1.1.5 Enter the quantity of the game.

##### 1.1.6 Click on the save button.

#### 1.2 Update Game details.

##### 1.2.1 Edit game images and upload new images.

##### 1.2.2 Enter the new game price.

##### 1.2.3 Update availability status.

##### 1.2.4 Click on the save button.

#### 1.3 Remove the board game.

##### 1.3.1 Click on the delete button next to the game.

##### 1.3.2 Confirm the deletion.

#### 1.4 Manage order.

##### 1.4.1 Click on the 'manage orders' button.

##### 1.4.2 Review the order details.

##### 1.4.3 Click on 'returned' button.

##### 1.4.4 Click on 'delivered' button.

**Plan 1:** Do 1.1, when there is a need to add a new game. Do 1.2, when existing game details need to be updated.

Do 1.3 when a game is outdated or is not necessary. Do 1.4 when a game has been returned to the inventory.

**Plan 1.1:** Do 1.1.1, ... ,1.1.5 in any order. Do 1.1.6 after completing 1.1.1 to 1.1.5.

**Plan 1.1.1:** Do 1.1.1.1, 1.1.1.2, 1.1.1.3 in any order.

**Plan 1.2:** Do 1.2.1 when images need an update. Do 1.2.2 when the game price needs to be updated. Do 1.2.3 when the availability status of the game needs to be updated. Do 1.2.4 after performing any of 1.2.1 to 1.2.3.

**Plan 1.3:** Do 1.3.1, 1.3.2 in the same order.

**Plan 1.4:** Do 1.4.1 - 1.4.2 in the same order. Do 1.4.3, when the customer returns the order. Do 1.4.4, when customer picks up the order.

**Goal (Customer):** Explore and discover board games. Utilize filtering and sorting options to find the perfect game based on preferences.

2 Search and browse the board games.

2.1 Search the board games.

2.1.1 Enter the keyword in the search bar.

2.1.2 Click on the search button.

2.2 Select the filters.

2.2.1 Click on the filter icon.

2.2.2 Choose the filter options.

2.2.3 Click on “apply filters” button.

2.3 Select the sorting option.

2.3.1 Click on the ‘sort’ icon.

2.3.2 Choose the ‘sort’ option.

2.4 View required game details.

2.4.1 Scroll through the list of games.

2.4.2 Click on the game required.

**Plan 2:** Do 2.1 first. Do 2.2 when preferences are to be applied. Do 2.3 when sorting based on priorities is required. Do 2.4 at the end.

**Plan 2.1:** Do 2.1.1 - 2.1.2, in that order.

**Plan 2.2:** Do 2.2.1 - 2.2.2 – 2.2.3, in that order.

**Plan 2.3:** Do 2.3.1 – 2.3.2 in that order.

**Plan 2.4:** Do 2.4.1 – 2.4.2 in that order.

**Goal (Customer):** Book and reserve board games of choice selecting the date range, quantity, and completing the secure checkout process with the preferred payment method.

3 Booking and reservation of board game.

3.1 Choose from the availability calendar.

3.1.1 Click on the calendar icon.

3.1.2 Choose the date range.

3.1.3 Click on the save button.

3.2 Choose the quantity required.

3.2.1 Click on the quantity dropdown.

3.2.2 Select the required number for quantity.

3.3 Click on the 'Add to cart' button.

3.4 Click on the 'Go to cart' button.

3.5 Checkout.

3.5.1 Click on the Buy Now button.

3.5.2 Select the payment method (Credit/Debit)

3.5.3 Enter Card Details

3.5.3.1 Enter the Card Number

3.5.3.2 Enter the name on the card.

3.5.3.3 3.5.3.3 Enter the expiry date on the card.

3.5.3.4 3.5.3.4 Enter the CVV.

3.5.3.5 3.5.3.5 Enter zip code.

3.5.3.6 3.5.3.6 Click on 'Make payment' button.

**Plan 3:** Do 3.1, 3.2 in the same order. Do 3.3 and 3.4 in that order when adding and going to the cart is required.

**Plan 3.1:** Do 3.1.1 through 3.1.3, in that order.

**Plan 3.2:** Do 3.2.1, 3.2.2, in that order.

**Plan 3.5:** Do 3.5.1 through 3.5.3 in that order.

**Plan 3.5.3:** Do 3.5.3.1 through 3.5.3.6 in that order.

**Goal (Customer):** Share valuable feedback and reviews for the games. Rate the game, write thoughts briefly, and include supporting images.

4 Give feedback/reviews.

4.1 Select 'add review' button on the game details page.

4.2 Select the rating (1-5) from the options.

4.3 Enter description for the review.

4.4 Add images supporting the review.

4.5 Click on 'submit review' button.

**Plan 4:** Do 4.1 – 4.5, in that order.

**Goal:** Create a user profile page where individuals can store their personal information and easily track both their past rental history and current active rentals.

5 Manage user profile.

5.1 Update personal details.

5.1.1 Click on the 'edit profile' button.

5.1.2 Add username.

5.1.3 Add email address.

5.1.4 Add profile picture.

5.2 Check Orders

5.2.1 Check the active rental sections.

5.2.1.1 Click on the active rentals button.

5.2.1.2 Scroll through the active rentals.

5.2.2 Check the rental history section.

5.2.2.1 Click on the rental history button.

5.2.2.2 Scroll through the rental history.

**Plan 5:** Do 5.1, when personal details need to be updated. Do 5.2, when order details are to be viewed.

**Plan 5.1:** Do 5.1.1 - 5.1.4 in that order.

**Plan 5.2:** Do 5.2.1 when active rentals are to be viewed. Do 5.2.2, when rental history is to be viewed.

**Plan 5.2.1:** Do 5.2.1.1 – 5.2.1.2 in that order.

**Plan 5.2.2:** Do 5.2.2.1 – 5.2.2.2 in that order.



Domain Analysis:

The Entity Relationship diagram is attached below.

