

Taller 1 Modelos de Programación

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1.

1. **Juan David:** "I would like to see a list of available classic games, like Pac-Man and Space Invaders."
2. **María Camila:** "It would be great to customize the exterior design of the machine, with different colors and graphics."
3. **David:** "I wish the machine had connectivity options, like Wi-Fi for software updates."
4. **Ana María:** "I would love it to include a section for multiplayer games to play with friends."
5. **Andres:** "It would be useful to have a detailed description of each game, including the story and instructions."
6. **Sofía:** "I would like to see options for the size and dimensions of the machines to know which one fits best in my space."
7. **Pedro:** "I wish the machine had an option to add new games in the future."
8. **Laura:** "It would be great if the machine had a touch screen to facilitate menu navigation."
9. **Jorge:** "I would like to see a section of reviews and ratings from other users about the games."
10. **Elena:** "I wish the machine had a high-quality sound system for a better gaming experience."
11. **Andrés:** "It would be useful to have an installation and maintenance guide for the machine."
12. **Paula:** "I would like to see financing options or payment plans to buy the machine."
13. **Diego:** "I wish the machine had an option to save game progress."
14. **Natalia:** "It would be great if the machine had a virtual reality option for a more immersive experience."
15. **Julian:** "I would like to see a section of additional accessories, like extra controllers or special seats."

2.

1. **As a user,** I want to see a list of available classic games, allowing me to choose from options like Pac-Man and Space Invaders.
2. **As a customer,** I want to customize the exterior design of the machine with different colors and graphics, allowing me to have a machine that fits my personal style.
3. **As a user,** I want the machine to have connectivity options like Wi-Fi for software updates, enabling me to keep the device up-to-date and in optimal condition.

4. **As a player**, I want the machine to include a section for multiplayer games, allowing me to play with friends and enjoy a social experience.
5. **As a user**, I want a detailed description of each game, including the story and instructions, so I can better understand the games before playing them.
6. **As a buyer**, I want to see options for the size and dimensions of the machines, allowing me to choose the machine that best fits my available space.
7. **As a user**, I want the option to add new games in the future, allowing me to expand my game collection over time.
8. **As a player**, I want the machine to have a touch screen for easier menu navigation, enabling more intuitive interaction with the system.
9. **As a customer**, I want to see a section of reviews and ratings from other users about the games, helping me make more informed decisions about which games to choose.
10. **As a user**, I want the machine to have a high-quality sound system, providing a more immersive and satisfying gaming experience.
11. **As a buyer**, I want an installation and maintenance guide for the machine, allowing me to set up and maintain it without issues.
12. **As a potential customer**, I want to see financing options or payment plans for purchasing the machine, making it more accessible for me to acquire.
13. **As a player**, I want the machine to have the option to save game progress, allowing me to continue playing from where I left off.
14. **As a video game enthusiast**, I want the machine to offer a virtual reality option for a more immersive experience, enjoying a new dimension in gaming.
15. **As a user**, I want to see a section of additional accessories, such as extra controllers or special seats, further customizing my gaming experience.

6. Report

1. User Stories

Juan: "I would like to see a list of available classic games, like Pac-Man and Space Invaders."

María: "It would be great to customize the exterior design of the machine, with different colors and graphics."

Carlos: "I wish the machine had connectivity options, like Wi-Fi for software updates."

Ana: "I would love it to include a section for multiplayer games to play with friends."

Luis: "It would be useful to have a detailed description of each game, including the story and instructions."

Sofía: "I would like to see options for the size and dimensions of the machines to know which one fits best in my space."

Pedro: "I wish the machine had an option to add new games in the future."

Laura: "It would be great if the machine had a touch screen to facilitate menu navigation."

Jorge: “I would like to see a section of reviews and ratings from other users about the games.”

Elena: “I wish the machine had a high-quality sound system for a better gaming experience.”

Andrés: “It would be useful to have an installation and maintenance guide for the machine.”

Paula: “I would like to see financing options or payment plans to buy the machine.”

Diego: “I wish the machine had an option to save game progress.”

Natalia: “It would be great if the machine had a virtual reality option for a more immersive experience.”

Ricardo: “I would like to see a section of additional accessories, like extra controllers or special seats.”

2. Object-Oriented Principles Analysis

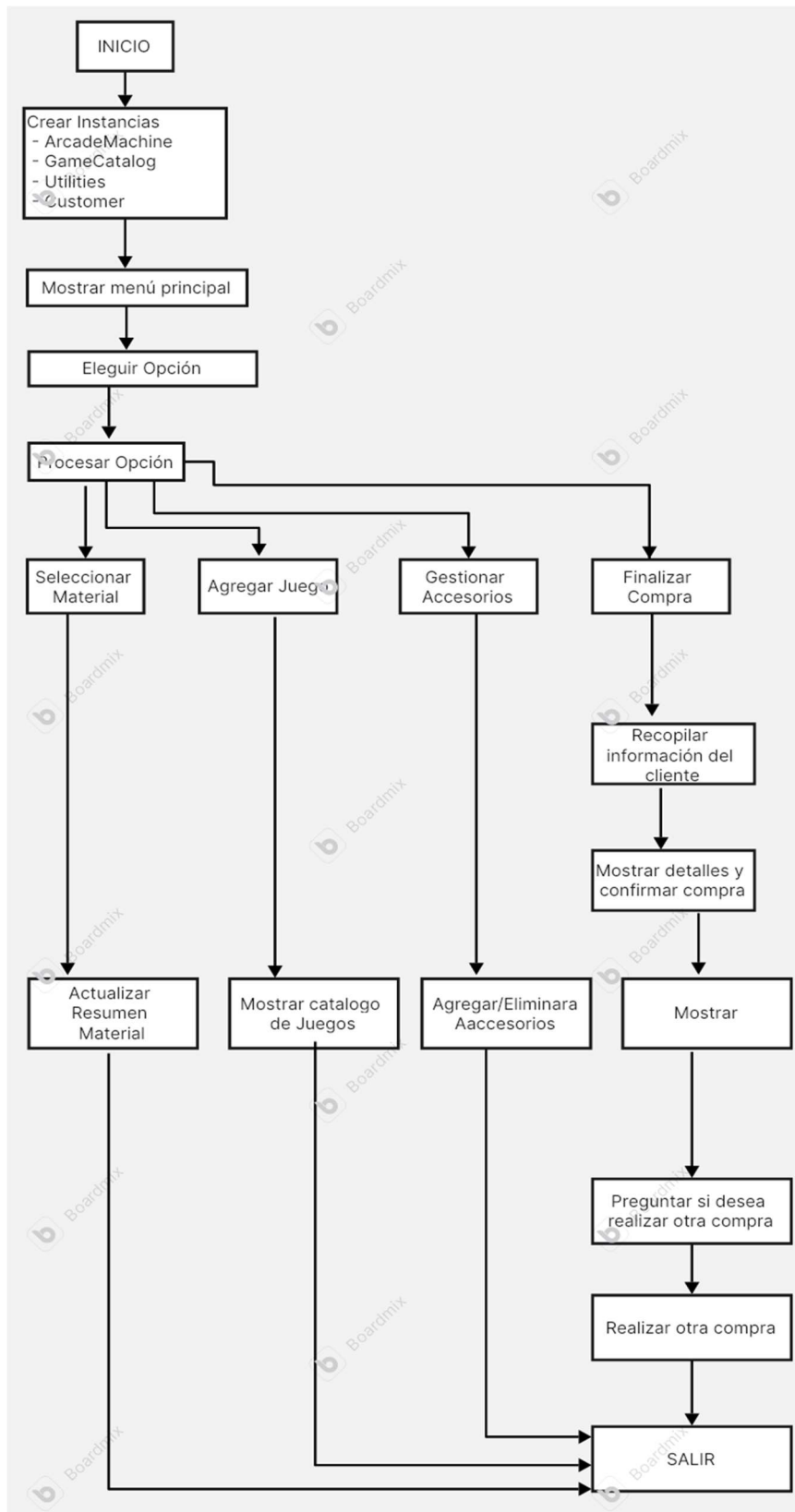
- **Encapsulation**
 - **The ArcadeMachine class encapsulates the attributes material and gamesadded.**
 - **The Customer class uses encapsulation to store personal customer information.**
- **Abstraction**
 - **The Utilities class provides an abstraction for clearing the console.**

3. CRC Cards (Class-Responsibility-Collaborator)

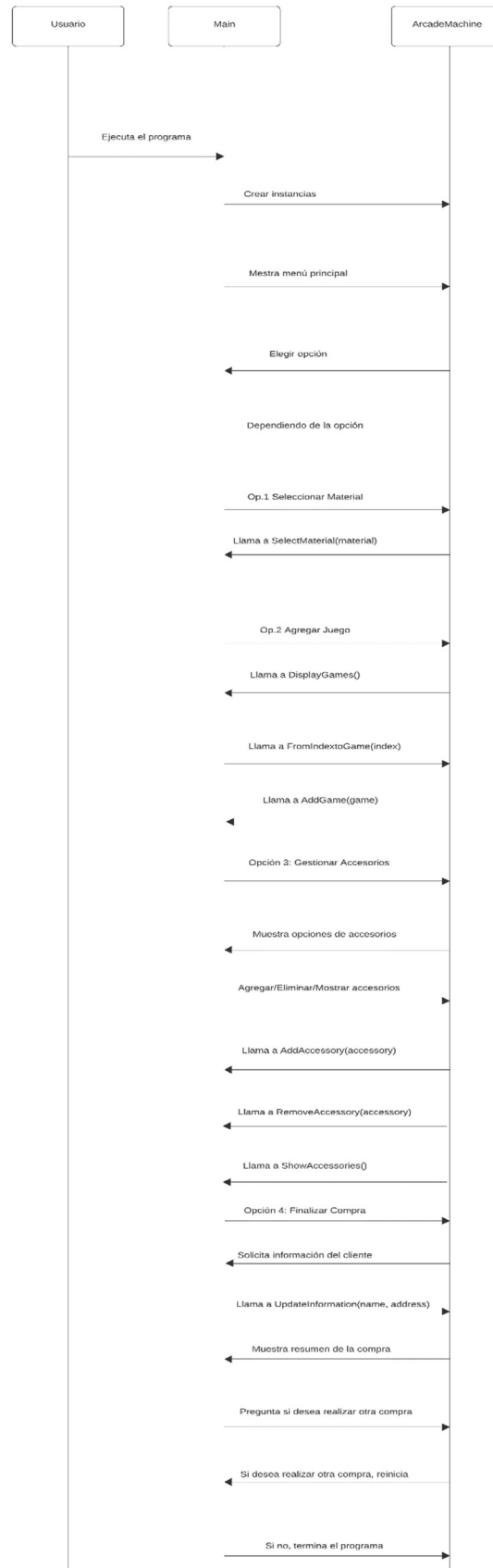
- **ArcadeMachine Class**
 - **Responsibilities:**
 - **Store the selected material.**
 - **Maintain a list of added games.**
 - **Display the chosen games.**
 - **Collaborators:**
 - **GameCatalog class to obtain the list of available games.**
 - **Customer class to store customer information.**
- **GameCatalog Class**

- **Responsibilities:**
 - **Maintain the list of available games.**
 - **Display the list of games.**
 - **Convert indices into game names.**
- **Collaborators:**
 - **ArcadeMachine class for adding games to the machine.**

4. Activity Diagrams



5. Sequence diagrams.



6 Class diagram.

