



Republic of the Philippines
City of Olongapo

GORDON COLLEGE

Olongapo City Sports Complex, East Tapinac, Olongapo City
Tel. No. (047) 224-2089 loc. 314



4/18/2024

Midterm Exam

Part I.

Questions

Niche Identification

1. Describe two factors to consider when selecting a suitable niche for this marketplace model.

-The two factors to consider when selecting a suitable niche are Demand and Supply Chain Complexity. Demand is a very important factor for it represents what niche enthusiasts are engaging more. This factor also determines the potential sellers and buyers of the chosen niche. Supply Chain Complexity is a factor that also should also be considered for it relates to product authenticity; which is a very important sector (we don't want to sell vintage items which are counterfeit or a replica), Supply Chain Complexity also relates to regulatory compliance, logistics and shipping, supplier relationships, and quality control.

2. Besides vintage cameras and comic books, propose one other niche this model could work well for and explain your reasoning.

-Besides vintage cameras and comic books, another niche that could work well for this model are limited edition sneakers, vintage vinyl records, rare coins and currencies (especially even in the Philippines, they buy old coins), antique furniture, and vintage watches.

1. Limited Edition Sneakers – Sneaker collecting has become a significant subculture with a passionate community worldwide. Enthusiasts often seek out rare or limited-edition sneakers, similar to collectors of vintage cameras and comic books.
2. Vintage Vinyl Records – Vinyl records come in various formats, editions, and conditions, offering a great range of inventory for buyers and sellers.
3. Rare Coins and Currencies – Rare Coins and Currencies are popular, for it has its historical value; it is like having a piece from an entire story related to that coin.
4. Antique Furniture – The same goes for the rare coins and currencies, antique furniture will definitely work for this niche model for it has history significance. Another reason is that, these Antique Furniture often has their own unique aesthetics, with fine designs, extreme caution to details, and high-quality materials that are not commonly found in modern mass-produced furniture.
5. Vintage Watches – This niche has been going on for long too. Vintage Watches are also unique in aesthetics. They have exquisite craftsmanship and intricate mechanical



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movements that are admired by enthusiasts. Each timepiece represents a blend of artistry, engineering, and precision, appealing to individuals who appreciate fine craftsmanship.

Trust Security

1. Why are trust and security particularly critical for a niche marketplace?

-Trust and security are particularly critical for a niche marketplace because the items being bought and sold are often unique, valuable, or specialized. Since niche marketplaces cater to enthusiasts and collectors, maintaining trust is essential for building long-term relationships and ensuring repeat business. Any instance of fraud, counterfeit items, or security breaches could greatly damage the reputation of the platform within the niche community, leading to a loss of trust and potentially driving users away to competitors or alternative channels.

2. Propose two specific features or mechanisms to increase buyer confidence in the platform.

-The two specific features or mechanisms to increase buyer confidence in the platform could include:

1. Escrow Services – Implementing an escrow service where payments are held securely until the buyer confirms receipt and satisfaction with the item. This provides buyers with assurance that their funds are protected until they receive the item as described.
2. Verified Seller Badges – Just like in Facebook Pages, introducing a verification process for sellers, where they undergo identity verification or provide proof of their credibility within the niche community. Sellers who pass the verification process could be awarded a "Verified Seller" badge, signaling to buyers that they are trustworthy and has good reputation.
3. Seller Feedback – We can add ratings to the seller to boost their credibility, this will help the buyers to feel assured that they are not going to get counterfeit items.



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Technology Choices

1. Justify the use of Python/Django for developing the backend of this e-commerce application.

-Python/Django is a suitable choice for developing the backend of this e-commerce application because of these reasons:

- **Rapid Development** – Django's high-level framework and built-in features allow for rapid development of robust web applications. This can speed up the development process, enabling the team to focus on implementing niche-specific features rather than low-level infrastructure concerns.
- **Scalability** – Python is known for its scalability, making it suitable for handling potential growth in user traffic and transaction volume as the marketplace expands. Django's scalability features, such as support for caching, database sharding, and load balancing, further enhance the platform's ability to handle increased demand.
- **Security**: Django provides built-in security features, such as protection against common web vulnerabilities like SQL injection and cross-site scripting (XSS). Another is that, Django's authentication and authorization system facilitates the implementation of user authentication, access control, and secure session management.

2. Explain why a phased approach might be more suitable than Agile for this project.

-A phased approach might be more suitable than Agile for this project due to the need for thorough testing and validation of niche-specific features before release. In a phased approach, the development process is divided into distinct phases, with each phase focusing on delivering a set of predefined features or functionalities. This approach allows for more thorough testing and refinement of niche-specific features, ensuring that they meet the unique requirements of the target audience. A phased approach provides stakeholders with clear milestones and checkpoints for evaluating progress and making informed decisions about resource allocation and feature prioritization.



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Success Metrics

1. Suggest three KPIs (Key Performance Indicators) for this marketplace, other than overall sales volume.

-Three KPIs (Key Performance Indicators) for this marketplace, other than overall sales volume, could include:

- **Customer Satisfaction Score** – We can measure the satisfaction of buyers and sellers after a transaction through surveys or ratings. A high score indicates positive user experiences and trust in the platform.
- **Return Rate**: We can monitor the rate of returns or disputes initiated by buyers. A low return rate suggests that buyers are satisfied with their purchases and trust the accuracy of item descriptions.
- **Average Transaction Value**: We can track the average value of transactions on the platform over time. An increasing average transaction value may indicate growing trust among buyers for higher-value items within the niche.

2. Discuss how social features within the app could be used to both promote community and provide insights for the business.

-Social features within the app could be used to both promote community engagement and provide insights for the business:

- **User Forums**: We can create dedicated forums or discussion boards within the app where users can share their experiences, ask questions, and connect with fellow enthusiasts. Monitoring user discussions can provide valuable insights into user preferences, trends, and potential feature enhancements.
- **User-generated Content**: We can encourage users to share photos, videos, or reviews of their purchases within the app. User-generated content not only creates a sense of community but also serves as social proof, influencing other users' purchasing decisions. Analyzing user-generated content can help identify popular items, trends, and influencers within the niche community.



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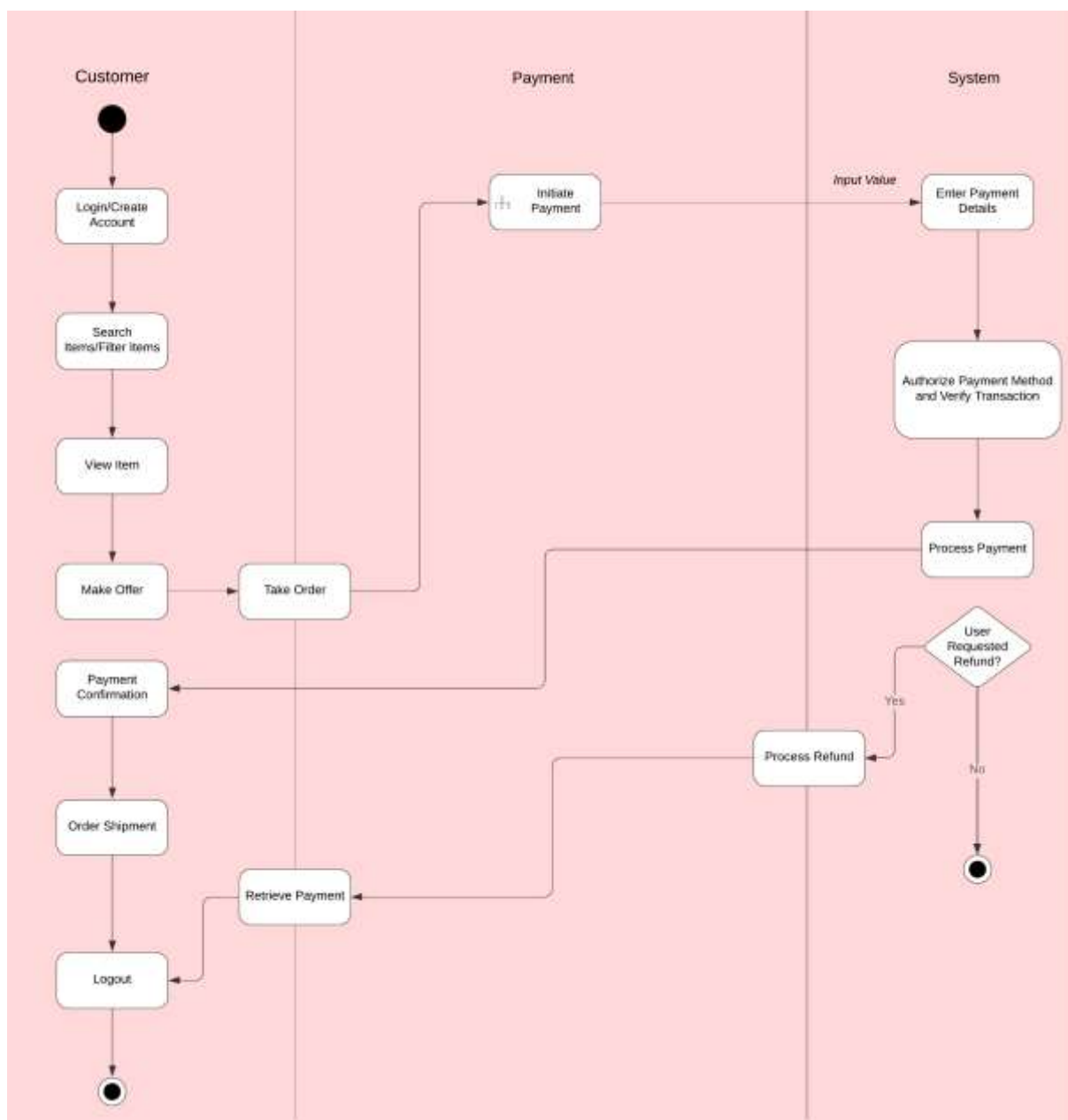
Part II

Designs

1. Design Activity diagram, Class diagram and Use-case diagram for NicheCentral based on the solutions provided.

Activity Diagram

Customer





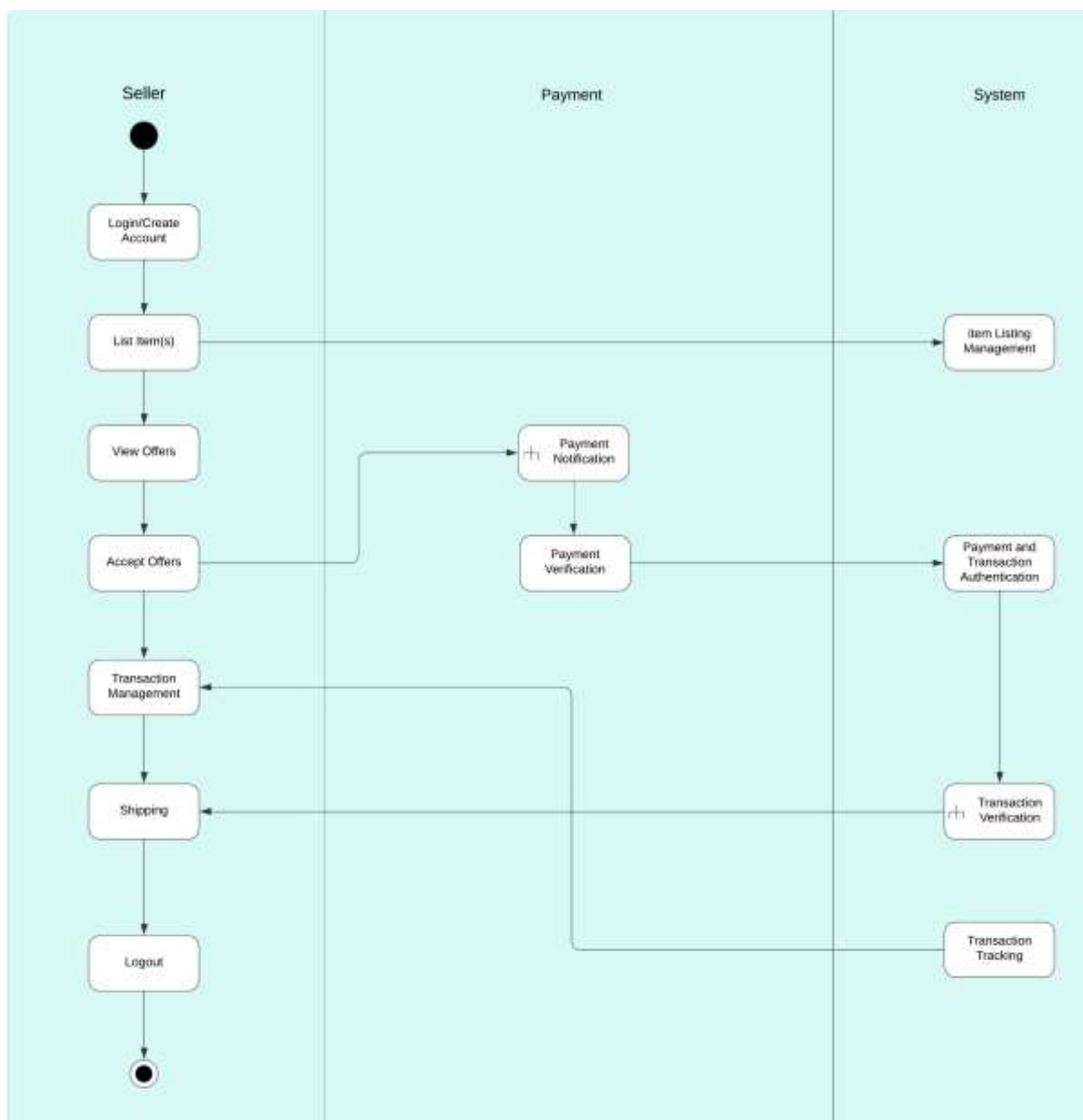
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Seller





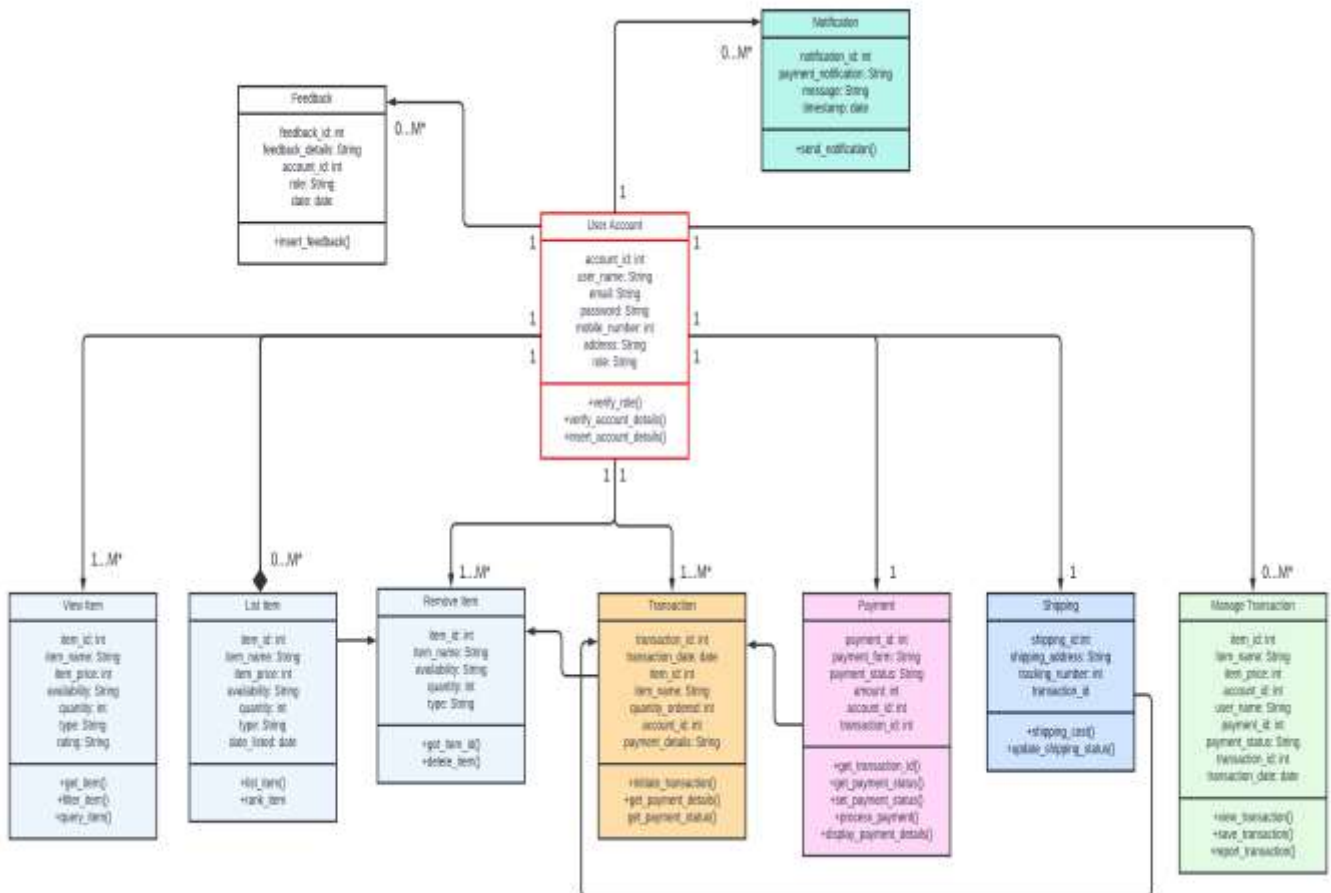
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Class Diagram





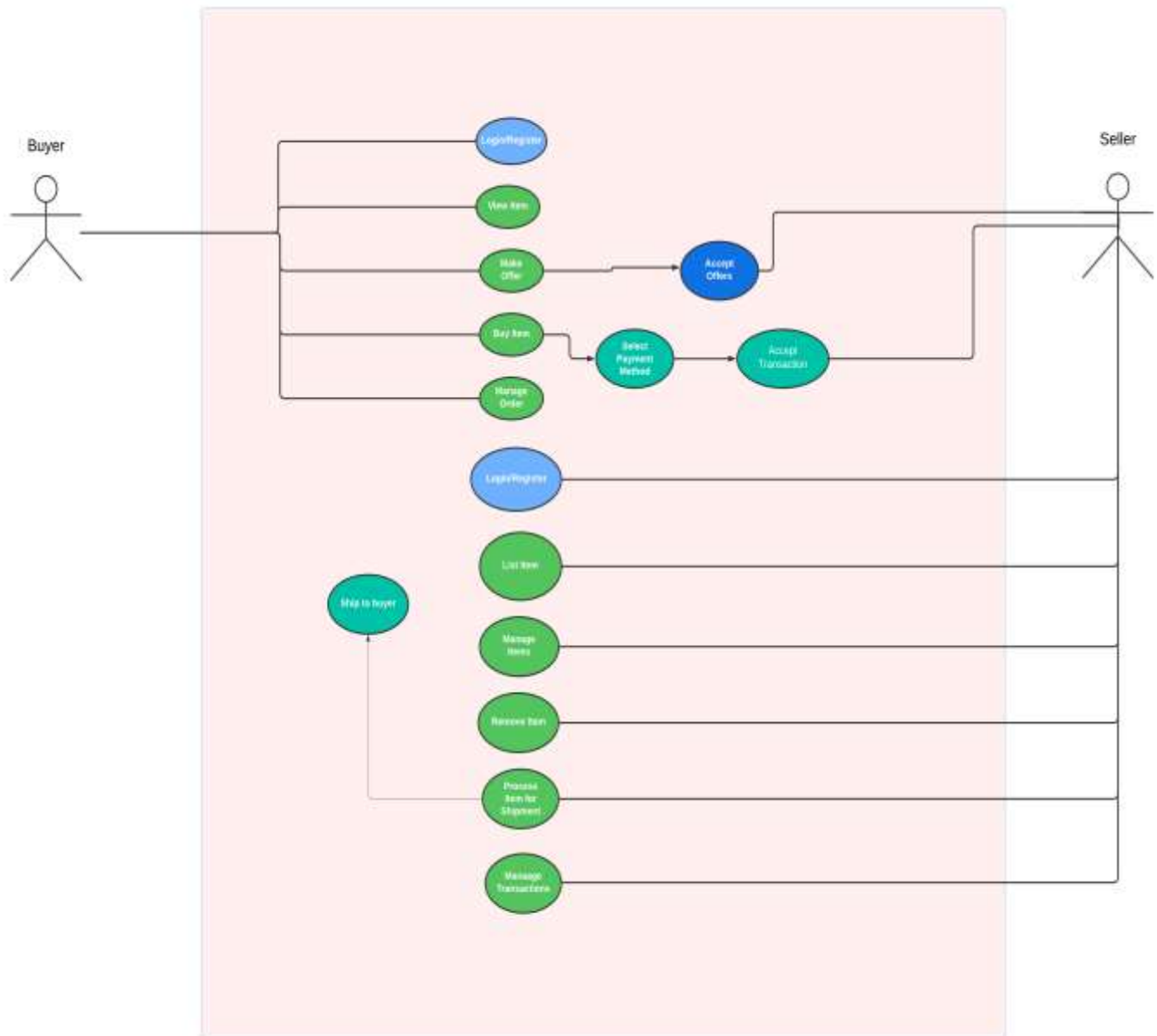
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Use Case Diagram



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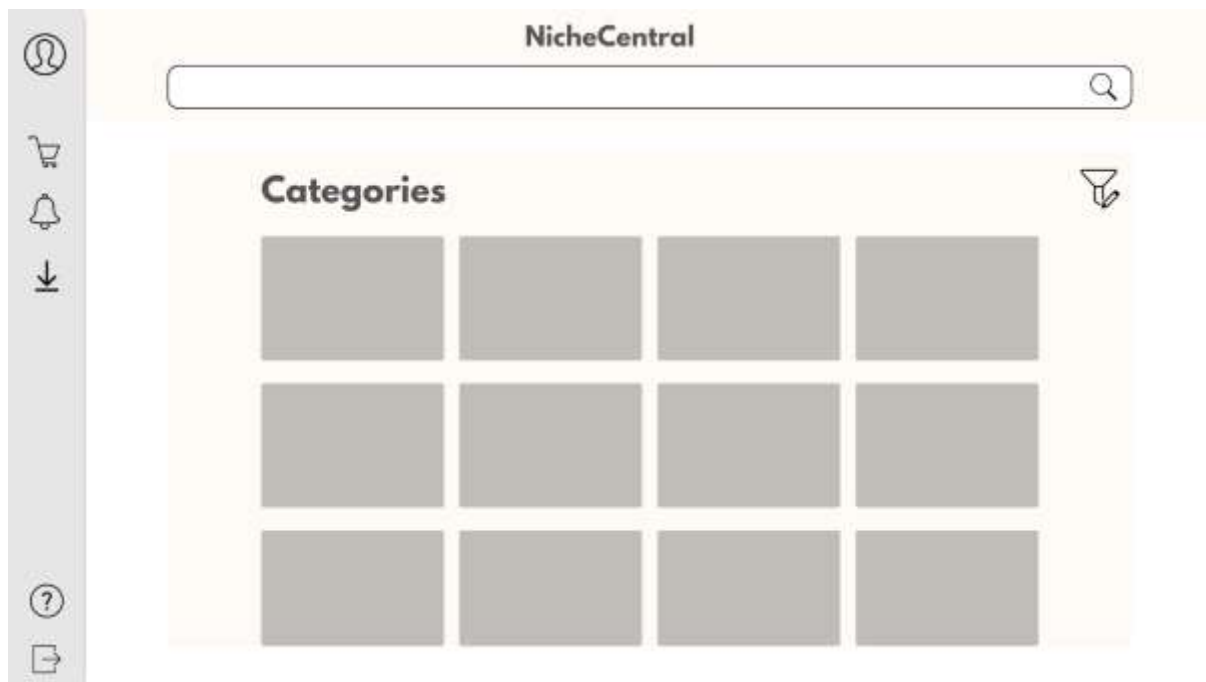
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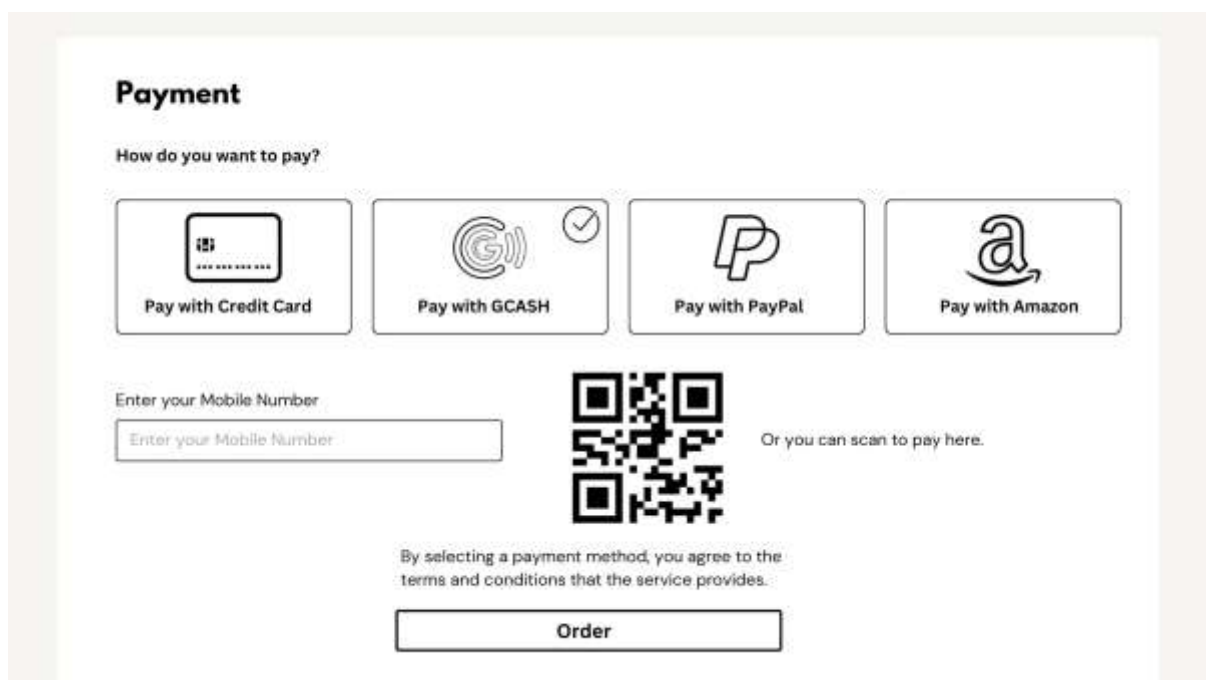


2. Design a simple UI design for at least 3 features provided in the solution.

Home



Payment Selection





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Item Listing

Add Items

Fill in these forms to proceed

Sale Management



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