Hamilton Ko, Kayzelyn Barrett, Kaylee Doliente, Andy Dien, Janina Wu, Erick Guerrero

Knick Knack Nook
Team Assignment 3: Requirements Doc, WBS, and WBS Dictionary

The Collectors

Hamilton Ko, Kayzelyn Barrett, Kaylee Doliente, Janina Wu, Andy Dien, Erick Guerrero

University of California, Irvine

Informatics 151, Fall 2024

Dr. Bill Jung

11/03/2024

Hamilton Ko, Kayzelyn Barrett, Kaylee Doliente, Andy Dien, Janina Wu, Erick Guerrero

Preliminary Requirements Doc

Name	Category	Source	Justification for Inclusion
Obtain partnerships with companies (Pop Mart and Sonny Angeles)	Project Manager, Project Prerequisite	Management, Stakeholder	- Will enable collaboration and certification from both companies, allowing for authentic and legal sale of their figurines to gain trust from customers to know they are purchasing authentic items. - To have a competitive edge, we can assist both companies with exclusive drops or limited-edition releases through notifications.
Obtain a license to sell merchandise from respective companies	Project Manager, Project Prerequisite	Management, Stakeholder	- The platform will be able to work directly with manufacturing and distribution partners to keep up with merchandise and assist with inventory management. - The platform will constantly have accessibility to allow for users to purchase directly in app.
Obtain information about all available figurine collections	Project Prerequisite	Data Management	- To build a comprehensive platform for collectors, it's essential to have detailed information about available figurine collections. - Will enable our app to offer accurate information and help users track collections.
Create server	Software Development	IT Department	- Support the platforms operations, enabling secure data storage, user management, and consistent access. - Ensures our app can handle user interactions, data transactions, and media uploads effectively.
Create a database	Software Development	IT Department	The database will be able to show a full catalog of every

Hamilton Ko, Kayzelyn Barrett, Kaylee Doliente, Andy Dien, Janina Wu, Erick Guerrero

			possible figure across multiple series. It will also be able to track our inventory so potential customers can easily see if the figure they want is available or add to the inventory by listing their duplicates. ● It shall also hold account information for each user allowing a simple login where all their trades and purchases are saved.
Hire a specialist	Project Manager, Budget Management	Human Resources	● A specialist will be hired to follow blind box trends and help decide which figures to focus on restocking based on popularity and market trends. ● They will also ensure that listed items meet quality standards (especially blind boxes not connected to Sonny Angeles, Smiskis, and Pop Mart).
Hire data analyst	Project Manager, Data Management, Budget Management	Datasheets, Human Resources, Accounting	● The data analyst will work with the specialist in determining the user trends of our app and adjusting to their needs. ● The analyst will help create a budget plan based on data. ● Visualize spreadsheets and trend charts of user interaction.
Conduct competitive analysis	Project Prerequisite, Project Planning	Management, Stakeholder	● Work between Specialist and Data Analyst to determine our competitors. ● Identifying our distinguishable features from the market. ● Helps the team and stakeholders reestablish the expectations for the application.
Perform user survey about interface layout and usability	Customer Engagement	Client Management	● Identify target audience and decide upon a surveying method ● Perform surveys within time constraint and collect user

Hamilton Ko, Kayzelyn Barrett, Kaylee Doliente, Andy Dien, Janina Wu, Erick Guerrero

			feedback
Analyze user provided feedback and adjust accordingly	Customer Engagement, Data Management	Management	• Create visualizations of user feedback for simplified understanding of user trends • Analyze feedback noting trend patterns and any improvements or alterations to be made • Discuss findings with development team and implement changes

Hamilton Ko, Kayzelyn Barrett, Kaylee Doliente, Andy Dien, Janina Wu, Erick Guerrero

Requirements Doc

Requirements Num.	Name	Category	Source	Status
R1	Obtain partnerships with companies (Pop Mart and Sonny Angeles)	Project Manager, Project Prerequisite	Management, Stakeholder	In Progress. Management team is currently working on obtaining partnerships with these companies.
R2	Create server	Software Development	IT Department	Complete. Development team had worked with the data analyst and specialist to develop a running server with functionalities and UI.
R3	Hire data analyst	Project Manager, Data Management, Budget Management	Datasheets, Human Resources, Accounting	Complete. Management team hired a data analyst.
R4	Conduct competitive analysis	Project Prerequisite, Project Planning	Management, Stakeholder	In Progress. Management team is currently working on the analysis.
R5	Perform user survey about interface layout and usability	Customer Engagement	Client Management	In Progress. Management team is conducting the think-aloud and user personas testing. Deadline is extended for a week.

Hamilton Ko, Kayzelyn Barrett, Kaylee Doliente, Andy Dien, Janina Wu, Erick Guerrero

WBS (Work Breakdown Structure)

Date: November 3, 2024

Project Name: Knick Knack Nook

1.0 Obtain partnerships with companies (Pop Mart and Sonny Angels)

1.1 Logistical Planning

1.1.1 Business Registration: Acquire necessary business licenses and registrations to ensure Knick Knack Nook's legal compliance as dictated by California law.

1.1.2 Business Planning

1.1.2.1 Research Pop Mart and Sonny Angels distribution requirements and minimum orders, reallocating budget and resources if needed.

1.1.2.2 Establish framework for distribution logistics including shipping, receiving, storing.

1.1.2.3 Prepare a business proposal including previously established research and framework.

1.2 Negotiating Distribution Rights

1.2.1 Apply for wholesale distribution

1.2.1.1 Contact companies of interest regarding distribution and complete necessary applications.

1.2.2 Negotiations and Finalization

1.2.2.1 Delegate a consultant to present business proposal and manage negotiations between companies of interest, reporting back to the team and making changes as necessary.

1.2.2.2 Once agreements have been reached between consultant and companies of interest, review and sign formalized distribution agreements.

1.3 Relationship Maintenance

1.3.1 Maintain necessary contact and provide market insights and customer feedback to strengthen relationships with companies of interest.

Hamilton Ko, Kayzelyn Barrett, Kaylee Doliente, Andy Dien, Janina Wu, Erick Guerrero

2.0 Create Server

2.1 Server setup

2.1.1 Choose hosting provider

2.1.2 Choose server type (i.e. cloud-based, dedicated)

2.1.3 Configure server environment

2.1.4 Establish network settings

2.2 Security configuration

2.2.1 Install security software (i.e. antivirus)

2.2.2 Set up user access control (i.e. permissions, roles)

2.2.2 Enable data encryption

2.2.2 Regular security monitoring

2.3 Data storage and back-up

2.3.1 Configure database (i.e. mySQL, MongoDB)

2.3.2 Set up data backup protocols (i.e. frequency, storage location)

2.3.3 Test data recovery processes

2.3.4 Plan for scaling storage as needed

2.4 Server testing and maintenance

2.4.1 Perform load testing (ensure server can handle traffic)

2.4.2 Monitor server performance (i.e. CPU usage, memory)

2.4.3 Schedule regular maintenance

2.4.4 Implement troubleshooting procedures (for quick problem resolution)

3.0 Hire data analyst

3.1 Define Role and Requirements

3.1.1 Define tasks (i.e. user data tracking, trend identification)

3.1.2 Specify Skills (i.e. data visualization, SQL, statistics analysis, spreadsheets)

Hamilton Ko, Kayzelyn Barrett, Kaylee Doliente, Andy Dien, Janina Wu, Erick Guerrero

3.1.3 Determine project goals

3.1.3.1 Outline how data will impact decisions made and the overall user experience.

3.2 Data Collection

3.2.1 Use purchase trends to decide which figures to offer on the main page.

3.2.2 Find which new releases are most desirable.

3.2.3 Determine missing data and inconsistencies

3.2.4 Use data to suggest UI adjustments for increased user engagement.

3.3 Budget Plan

3.3.1 Determine budget projections

3.3.1.1 Using growth trends project costs for future resources

3.3.2 Choose high-demand figures to restock based on user data.

3.3.3 Determine salary and benefits based on needed employees.

3.3.4 Meet with stakeholders to present data-driven budget requirements.

3.4 Collaboration

3.4.1 Meet bi-weekly with team members to discuss data trends.

3.4.2 Provide data to support decision-making.

4.0 Conduct competitive analysis

4.1 Identify other companies creating a similar application

4.2 Compare and contrast features offered by each company including ours

4.2.1 Create categories to rate each application.

4.2.1.1 Main Purpose of Service: Identify the main functionality for each company to understand why they stick out to the rest of the crowd.

4.2.1.2 Types of Figurines In the User's Inventory: Identify what figurines each company stores in their database for collectors to keep track of. How easy is it for users' to add more figurines to their collection, and what is the process that they follow?

Hamilton Ko, Kayzelyn Barrett, Kaylee Doliente, Andy Dien, Janina Wu, Erick Guerrero

4.2.1.3 Options to Search For Different Collections: Identify how each company stores data in regards to separating collections based on their respective brands, and each figurine in their respective collections.

4.2.1.4 Can They Sell Licensed Merchandise: Identify if the company solely just keeps track of what figurines a user has, or are they allowed to sell merchandise from companies as well.

4.2.1.5 Social and Community Features: Identify if users are able to share their collections and interact with other users, and how they're able to do that.

4.2.1.6 Trading Ability: Identify if users are able to interact with one another in order to trade figurines in their collections, or are they able to just view them and compare them to their own collection?

4.2.1.7 Customer Reviews and Ratings: Identify what customers like about the app, and what they dislike to understand user satisfaction and common complaints.

4.3 Identify Brand and Marketing Strategy

4.3.1 Analyze the branding approaches and marketing strategies that other competitors use to give themselves a competitive edge.

4.3.2 Identify the users that each company is marketing to.

4.4 Identify the Technology and Platform Compatibility

4.5 Identify Our Budget in Order to Make Ourselves Unique in the Competition

5.0 Perform User Survey about Interface Layout and Usability

5.0.1 Identify stakeholders and target audience

5.0.2 Methodology

5.0.2.1 Decide on various methodologies to conduct

5.0.2.1.1 Moderated User Testing: Monitor user while navigating out application and taking notes based on certain trials and errors

Hamilton Ko, Kayzelyn Barrett, Kaylee Doliente, Andy Dien, Janina Wu, Erick Guerrero

50..2.1.2 Focus Groups: Target certain demographics or certain subcultures of our target audience and note the differences in usability if any

5.0.2.1.3 User Personas: Based on data outliers, conduct a user persona that captures the main target audience

5.0.2.1.4 Think Aloud Test: Users will voice their thoughts while navigating the application

5.0.2.2 Solidify timeframe for participants in the usability testing

5.0.2.3 Identify biases and concerns with testing

5.0.3 Collecting feedback from users

5.0.4 Data analysis tools

5.0.4.1 Create visualization to understand user feedback

5.0.4.1.1 Heatmaps and Click Maps: Analyze user interactions during the application

5.0.4.2 Compile list of feature changes and improvements

5.0.4.3 Analyze trend patterns

5.0.5 Reflection and implementation of feedback

5.0.5.1 Host a meeting with the development team to discuss feedback

5.0.5.1.1 Align expectations and keep changes realistic

5.0.5.1.2 Measure success and repeat cycle for consistent feedback

Hamilton Ko, Kayzelyn Barrett, Kaylee Doliente, Andy Dien, Janina Wu, Erick Guerrero

WBS Dictionary

Date: November 3, 2024

Project Name: Knick Knack Nook

WBS Item Number: 1.0

WBS Item Name: Obtain partnerships with companies

Description: In order to sell and distribute trinkets, we must acquire distribution agreements and partnerships with companies of interest. We must ensure that Knick Knack Nook is legally compliant with California business requirements, and obtain any necessary permits and licenses. After establishing business legality, we will conduct research on companies' distribution requirements and rework allocation of resources as needed. Following research, we will create a business proposal for our consultant present to companies of interest. Our consultant will enter negotiations with companies of interest, and provide feedback to the team as necessary. After the consultant has reached agreement with companies of interest, the formal distribution agreements will be finalized. Post finalization, the consultant will upkeep lines of communication with companies of interest in order to maintain good relations and partnership.

WBS Item Number: 2.0

WBS Item Name: Create server

Description: To establish a reliable and secure server for Knick Knack Nook, we must select an appropriate hosting provider and configure the server environment, which includes installing the OS and necessary software. Security measures such as firewalls and antivirus will be implemented to protect data, with regular security audits and monitoring. Data storage will be managed through a database, with backup and recovery protocols established to ensure data integrity. This task is needed for us to set up, secure, configure, and maintain a server to support our app. It would encompass server setup, security configuration, data storage management, and ongoing maintenance to ensure optimal performance and security.

WBS Item Number: 3.0

WBS Item Name: Hire data analyst

Description: Hiring a data analyst is essential for us to refine the user experience and helps us support project decisions based on data received. The data analyst will work with all team members providing the data required for each member to improve the application. They will also

Hamilton Ko, Kayzelyn Barrett, Kaylee Doliente, Andy Dien, Janina Wu, Erick Guerrero

help create a spreadsheet to budget accordingly. They will also work closely with stakeholders to ensure project strategies are up-to-date and to decide which future resources and features to prioritize. The stakeholders' insights will also play a critical role in guiding the direction of the project.

WBS Item Number: 4.0

WBS Item Name: Conduct competitive analysis

Description: Before we start developing the system, we want to compare all of the different companies that are similar to our application. We want to know the main functionalities of their app that makes it unique to their competitor, their marketing tactics that attract users to their app, and we want to know their compatibility with different technologies. With this data, we will find ways to make ourselves distinct from the rest of the competition.

WBS Item Number: 5.0

WBS Item Name: Perform User Survey about Interface Layout and Usability

Description: Once our application is complete, we want to test it against a controlled group of users before marketing it to the public. We plan to conduct 4 different test methods with our targeted audience of figurine and collectible enthusiasts. With that in mind, we need to sort out our method of collecting the data from each focus group. With that data, we plan to create various charts and visualizations for our data analysis and conduct a list of changes and refinements for our application. We will conclude with a meeting with the development team to discuss possible improvements for the application.

Hamilton Ko, Kayzelyn Barrett, Kaylee Doliente, Andy Dien, Janina Wu, Erick Guerrero

Project Contributions

Member Name	Role & Contributions
Andy Dien	- Team Liaison - Hire data analyst and perform user survey about interface layout in Preliminary Requirements - Requirements document status for R3 - WBS 5 Perform User Survey about Interface Layout and Usability - WBS Dictionary 5.0 Perform User Survey about Interface Layout and Usability
Hamilton Ko	- Liaison Backup - Set up document - Added requirements, categories, and sources in Preliminary Requirements Doc
Kaylee Doliente	- Member - Preliminary requirements document: Create server, create database - WBS 2.0 Create server - WBS Dictionary create server
Erick Guerrero	- Member - Preliminary requirements documents: create database, hire specialist - WBS 3.0 Hire Data Analyst - WBS Dictionary Data Analyst
Kayzelyn Barrett	- Member - Added Justification for Preliminary Doc for 1 and 2 - Added Status for Requirements Doc #1 - Created the WBS breakdown and description for Conduct Competitive Analysis
Janina Wu	- Member - WBS 1.0 Obtain partnerships with companies - WBS Dictionary Obtain partnerships

Hamilton Ko, Kayzelyn Barrett, Kaylee Doliente, Andy Dien, Janina Wu, Erick Guerrero

	with companies ● Preliminary requirements document: perform user survey about interface layout and usability, analyze user provided feedback and adjust accordingly