

Brandon Franklin

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Project Description

Jasmine Willis, an owner of a local art gallery, submitted a system request for her business, Willis Art Gallery, to our consulting group SAAD Co. After initial feasibility approval, we began to move forward in the system development life cycle in order to fulfill all needed requirements for a system proposal for Willis Art Gallery. The functionality of this system aimed to reach specific goals that would accommodate Ms. Willis and her gallery. These goals included recreating the art gallery experience virtually, providing a platform for Ms. Willis to manage auction and employee schedules, and a system to keep track of transaction, accounting, and client data.

System Request

Project Name: Willis Gallery Information System

Project Sponsor: Jasmine Willis, owner

Local art lover and entrepreneur, Jasmine Willis, recently established a gallery with a small performance space in the Richmond Arts District to promote both new and established artists from around the country. She started her business a few years ago by hiring a few part time employees so she could still attend art fairs and private auctions to build her collection as well as discover new talent and found herself quickly overwhelmed trying to juggle everything. After an initial period of struggling to learn about the business and trying to make a profit, things were just beginning to fall into place as the pandemic shut everything down. In the intermediate, she has been reading articles and researching alternative ways to engage her clientele until the gallery and performance space can fully reopen to the public and has determined that a suitable information system would allow her to better support both her business and the artists she represents. Jasmine had taken some information system courses in college and realized that she could move exhibitions and performances online and potentially expand her business by taking advantage of some of the newer technologies available. She has asked your team to help develop a system to meet her business needs.

Business Need: Recreate gallery/performance experience virtually, manage auction and employee schedules, transaction processing, financials and accounting, keep track of business contacts (artists, dealers) and clientele (for marketing/donor support).

Functionality: Facilitate and manage the business operations in order to:

- Schedule and manage work requests/events
- Establish a way to present exhibits/performances virtually
- Manage employees
- Manage financials and accounting
- Keep track of inventory
- Keep track of business contacts and customers
- Manage advertising/web presence
- Take advantage of newer technologies

Business Value: **Improve engagement/analytics to increase revenue, increase customer base,** improve efficiencies and maintain good relations with contacts and clientele

Special Issues and Constraints:

- Just purchased a laptop computer with an external HD webcam
- Currently uses only Microsoft Office software (Word, Excel)
- Knowledgeable about the internet and teleconferencing services
- Has a Facebook account for the business and know that many of her customers use Facebook, Instagram, Pinterest

Feasibility Study for Willis Gallery Information System

Statement of Purpose

SAAD CO. has completed a consultancy study for the feasibility of implementing an information system for Willis Gallery and details for this feasibility are listed in the following sections. The purpose of this study was to determine whether or not the introduction of an information system would meet or exceed the following business needs:

- Recreate gallery/performance experiences virtually
- Manage auction and employee schedules
- Improve transaction processing efficiency
- Improve financial and accounting efficiency
- Keep track of business contacts and clientele (for marketing/donor support).

Business Value Expectations

After a thorough analysis it has been concluded that an information system would overall improve the value and equity of Willis Gallery. This system would promote engagement and improve analytics to increase revenue, increase customer base, and improve efficiencies that would help maintain good relations with contacts and clientele.

Scope Statement

The scope of this study focused on the technical, economic, and organizational feasibility of this project as it pertains to meeting or exceeding certain functional requirements. An emphasis was placed on whether or not this project would improve facilitation and business management operations of these requirements. The information system would need to be able to perform the following:

- Schedule and manage work requests/events
- Establish a way to present exhibits/performances virtually
- Manage employees
- Manage finances and accounting
- Keep track of inventory
- Keep track of business contacts and customers
- Manage advertising/web presence
- Take advantage of newer technologies and stay updated

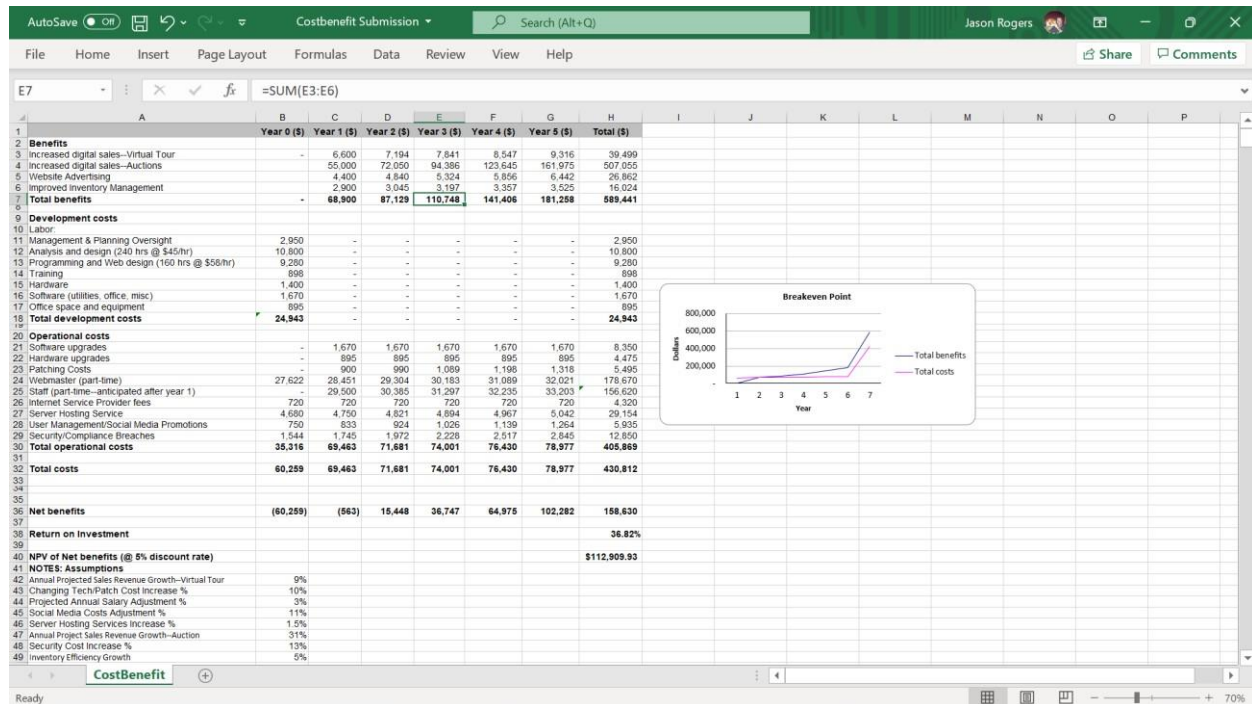
Technical Feasibility

There were little to no major risks associated with the design phase of this project. SAAD CO. is familiar with the business application development process and fluent in the technologies required to design this information system. However, there are potential risks associated with both the analysis and implementation phase of the project. More financial, inventory, and

advertising data would need to be collected before the design phase; this could potentially increase costs (this risk is categorized as low). Additionally, the staff for Willis Gallery are unfamiliar with the technology that would be implemented (this risk is categorized as medium). To mitigate these risks, some additional time should be allocated to the analysis phase of the project and additional costs should be accounted for to ensure proper training of employees.

Economic Feasibility

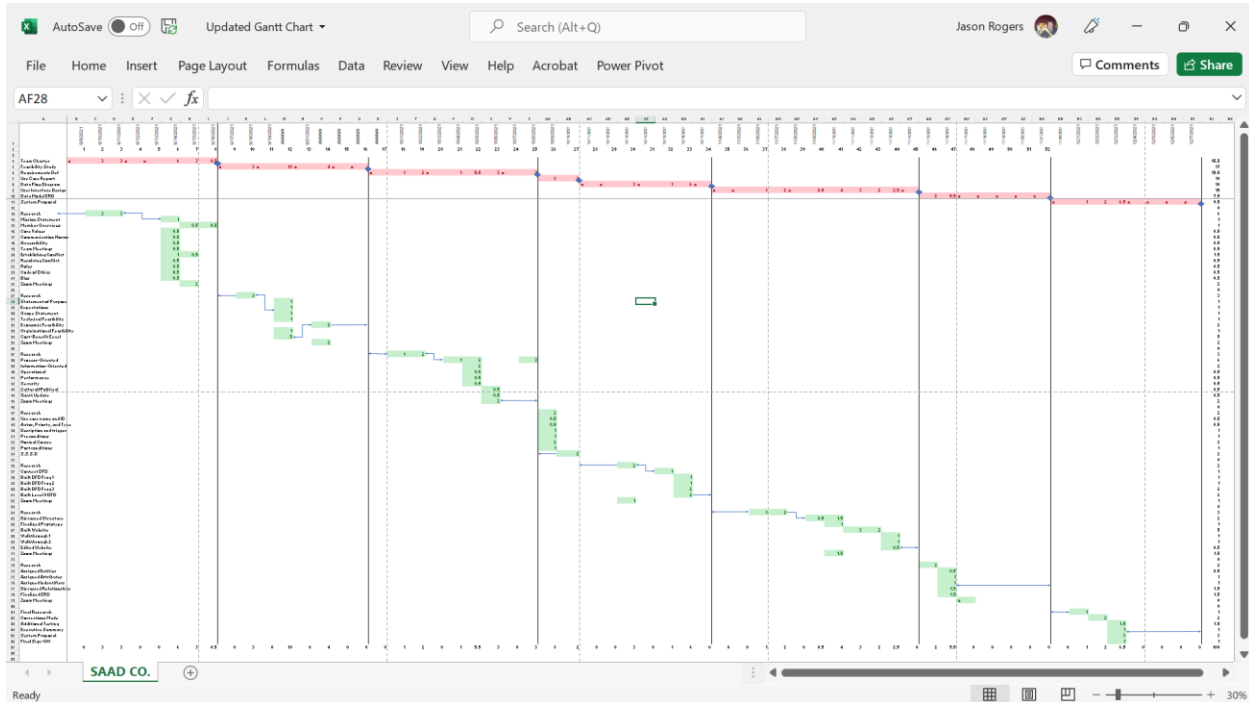
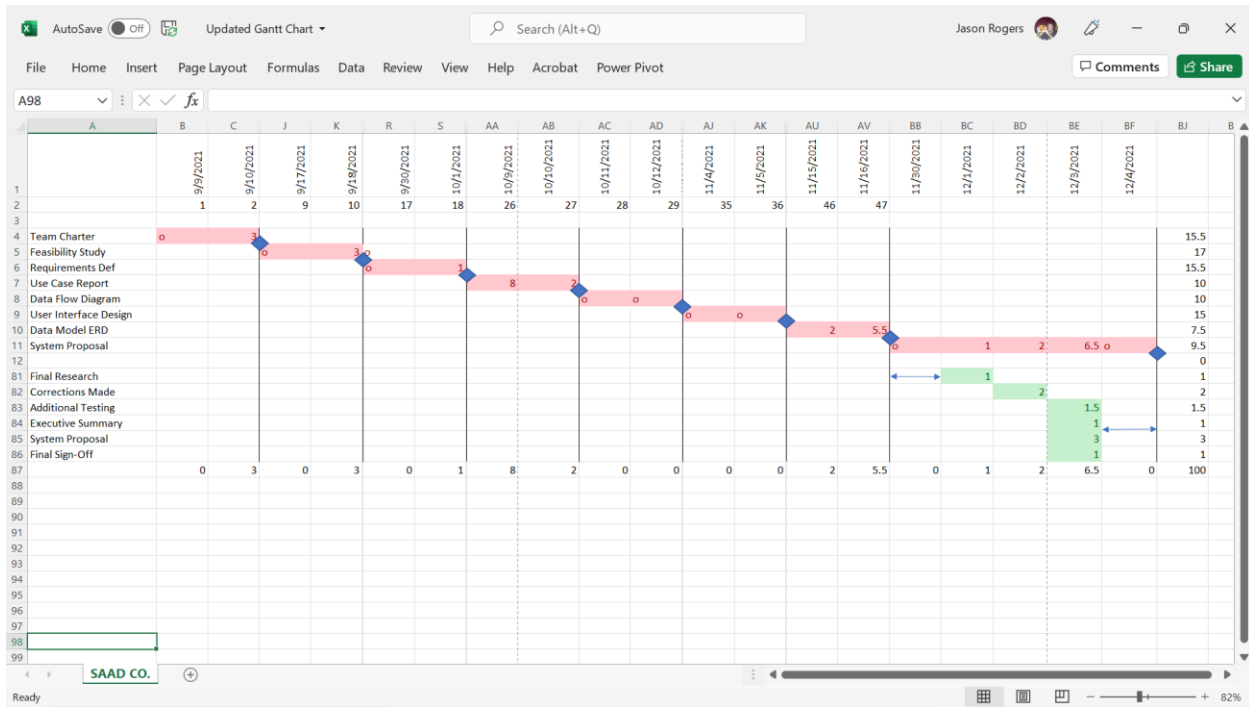
In order to run the art gallery optimally in the new climate, the business must pivot to a more virtual environment. Total up-front costs for the new information system are **\$60,259** and one considered risk of the new business model is that Willis Gallery won't break-even until the first quarter of year 3 (this risk is categorized as medium). However, projected growth in sales will mitigate this risk substantially. The Net Present Value of the initial system cost is **\$112,909.93** and the Return on Investment will be **36.82%** at the end of year 5 when compared to current market interest rates of 5%. Please refer to the spreadsheet below for a more detailed representation of the economic feasibility of this business.



Organizational Feasibility

The goals for this project are strongly aligned with the goals of Willis Gallery. This information system would greatly improve relations with both current and future business contacts, as well as bolster their online presence to ensure improved relations with clientele. The introduction of a featured and streamlined website will increase marketing opportunities. However, SAAD CO. will have access to limited user involvement (this risk is categorized as medium-to-high). To mitigate this risk a more traditional systems approach should be considered, such as systems prototyping.

Work Plan/Gantt Chart



Requirements Definition Statement for Willis Gallery Information System

Statement of Purpose

The purpose of this requirements definition is to establish the functional and nonfunctional requirements for the proposed information system for the Willis Gallery and broaden and clearly categorize each requirement.

Functional Requirements 1: Process-Oriented

- 1.1 The system must display a Homepage.
- 1.2 The system must display a list of options at the top right of the website.
- 1.3 The system must display an About us page.
- 1.4 The system must display a Contact us page.
- 1.5 The system must display a Special Events page.
- 1.6 The system must display an Upcoming Auctions page.
- 1.7 The system must allow users to view paintings currently available for sale.
- 1.8 The system must have the ability to search for available inventory.
- 1.9 The system should be able to retrieve pictures from storage.
- 1.10 The system should be able to display photos of available paintings.
- 1.11 The system should be able to display enlarged versions of the paintings when the user selects a particular painting.
- 1.12 The system must provide a virtual interactive tour of the gallery.
- 1.13 The system should be able to retrieve 360-degree photos from storage.
- 1.14 The system should be able to display 360-degree photos.
- 1.15 The system should provide a tab that reads “schedule a live tour”.
- 1.16 The system should be able to retrieve available times for guided tours.
- 1.17 The system should be able to display a page of available guided tours.
- 1.18 The system should display tabs that say “schedule tour” in the available slots.
- 1.19 The system should display a popup box that reads “Please provide us with your email” and a CTA button that says “finished” in the popup box when the “schedule tour” tab is selected.
- 1.20 The system should display a page that reads “We have sent you a confirmation email.” when the “finished” button is selected.
- 1.21 The system should display a page that says “Your private guided tour has been scheduled. Thank you, and we look forward to seeing you!” when the confirmation button in the email is selected.
- 1.22 The system should be able to display a page that shows upcoming tours and available tours for employees.
- 1.23 The system should be able to send notifications of tours 30 minutes in advance.
- 1.24 The system should display a function for Jasmine to schedule employee work hours.
- 1.25 The system should be able to connect to employee mobile devices remotely.
- 1.26 The system must alert employees of schedule changes.

- 1.27 The system should be able to display a page for Jasmine to adjust employee salary.
- 1.28 The system should be able to retrieve salary information from storage.
- 1.29 The system should be able to send weekly payments to employee accounts.
- 1.30 The system should be able to retrieve account information.
- 1.31 The system should be able to display a page that shows all current expenses.
- 1.32 The system should be able to retrieve expenses from storage.
- 1.33 The system should be able to display a page that shows all current revenue.
- 1.34 The system should be able to retrieve revenue from storage.
- 1.35 The system should be able to display a page that shows all ongoing expenses and revenue.
- 1.36 The system should provide a notice for customers to create an account for bidding or for making purchases.
- 1.37 The system should be able to display a “create an account” page.
- 1.38 The system must be able to identify email addresses.
- 1.39 The system must be able to email users an account confirmation email.
- 1.40 The system should display a “your account has been created” page after confirmation.
- 1.41 The system should display an option for email notifications for auctions.
- 1.42 The system should display a page that shows all upcoming auctions.
- 1.43 The system should display a popup box that says “join auction” when a particular auction tab is selected.
- 1.44 The system should display a box that says “oops you aren’t signed in” when a user clicks on an auction tab, and they aren’t signed in.
- 1.45 The system should be able to display a live feed of Jasmine standing next to the paintings, taking bids, and interacting with bidders during the auction after a user has clicked the join auction button.
- 1.46 The system should display a chatroom section at the bottom of the auction page for bidders to interact with Jasmine and one another.
- 1.47 The system should display tabs that say “bid” and “raise bid” during an auction.
- 1.48 The system should display a popup box that says “confirm bid” when the “bid” button is selected.
- 1.49 The system must identify and manage auction bids in real time.
- 1.50 The system should be able to retrieve previous bids from storage.
- 1.51 The system should display the list of bids and also display the confirmed sale when Jasmine finalizes the bid.
- 1.52 The system should display a tab that allows Jasmine to confirm the sale and also clear current bids from the user display.
- 1.53 The system should be able to send a responsive email that says “Congratulations on your purchase” whenever Jasmine finalizes a sale.
- 1.54 The system should be able to retrieve user emails from storage.
- 1.55 The system should be able to send notification emails for upcoming special events.
- 1.56 The system should be able to retrieve special events that have been scheduled from storage.

- 1.57 The system must provide a link to the Willis Gallery Facebook page.
- 1.58 The system must allow users to make online purchases.
- 1.59 The system must be able to retrieve likes, comments, and posts from Facebook.
- 1.60 The system should display a checkout page for purchases.
- 1.61 The system should be able to process multiple forms of payment.
- 1.62 The system should display a button in the lower right corner that says “Confirm Purchase” on the checkout page.
- 1.63 The system should display a confirmation page after filling in financial information for a purchase and clicking the “Confirm Purchase” button.
- 1.64 The system should display a button that says “Purchase Item” in the lower right corner of the confirmation page
- 1.65 The system must send a responsive email that says “Thank you for your purchase” when the “Purchase Item” button is selected.

2: Information-Oriented

- 2.1 The system will track inventory levels in real time.
- 2.2 The system should store painting photos and 360-degree gallery photos.
- 2.3 The system should store tour schedules and available tour schedules.
- 2.4 The system should store all user accounts created on the website.
- 2.5 The system should store current and previous employee schedules for up to three years.
- 2.6 The system will store employee salary and contact information.
- 2.7 The system will store all costs incurred on a quarterly and annual basis.
- 2.8 The system will store all sales incurred on a quarterly and annual basis.
- 2.9 The system will store all business and clientele contact information.
- 2.10 The system should store comments made by users during an auction.
- 2.11 The system should store all bids made during all auctions for up to three years.
- 2.12 The system should store dates for special events.
- 2.13 The system will store data posted on their Facebook Page for up to three years.
- 2.14 The system will store transaction history.

Nonfunctional Requirements 1: Operational

- 1.1 The system should run on any Apple, Android, or PC devices.
- 1.2 The system should be compatible with all web browsers.
- 1.3 The system provides customer confidentiality.

2: Performance

- 2.1 The system should be available 24 hours a day.
- 2.2 The interactive tour should be seamless when clicking on a different location.
- 2.3 Images for the gallery paintings should take no longer than 1.5 seconds to load.

2.4 Auction bids need to be updated in one second or less.

2.5 The system should support 500 users from 7:00-11:00 PM, 120 during other hours.

3: Security

3.1 The system includes virus protection and updates regularly.

3.2 Only Jasmine will have access to employee payroll.

3.3 Only Jasmine will have access to employee background files.

4: Cultural & Political

4.1 Systems use of personal information is in compliance with the Data Protection Act

4.2 System does not violate any terms of use with Amazon for server hosting services.

4.3 Artwork depicted on the Willis Gallery website does not violate any copyrights.

Use Cases Report for the Willis Gallery

Casual Use Cases:

Use Case Name: Schedule Guided Tour	ID: A-2	Priority: Medium
Actor: Customer		
Description: The customer selects a time to schedule a guided tour.		
Trigger: Customer wants to tour the gallery and view the paintings in person.		
Type: External		
Preconditions: <ol style="list-style-type: none">1. Guided tour information is available on the Willis Gallery website.2. Available times for a guided tour are accessible on the website.		
Normal Course: 1.0 Schedule a guided tour <ol style="list-style-type: none">1. The customer clicks on the Schedule Tour button on the Homepage.2. A page displays the available times that the customer can choose for a tour.3. The customer selects a time they prefer.4. A popup box is displayed requesting email information and a Finished button.5. The customer types in his/her/their email and then clicks Finished.6. The system sends the customer a verification email.7. The customer opens their email and chooses the Confirm Tour button to confirm.8. The system displays a page that reads "Your private guided tour has been scheduled".9. The system stores the scheduled tour in the Tours database.10. The system sends a notification to Jasmine that a customer has scheduled a tour.		
Postconditions: <ol style="list-style-type: none">1. The confirmed tour is stored in the Tours database.2. Jasmine notifies her employees of the tour and the date.		

Use Case Name: Schedule Employee Hours	ID: A-3	Priority: Medium
Actor: Gallery Manager		
Description: The manager chooses and selects times for employees' schedules.		
Trigger: The manager wants to make a schedule for the next work week.		
Type: External		
Preconditions: <ol style="list-style-type: none"> 1. The gallery manager is authenticated when logging into her account. 2. The schedule hours tool is available in the system. 		
Normal Course: <ol style="list-style-type: none"> 1.0 Schedule employee hours <ol style="list-style-type: none"> 1. The manager clicks on the schedule hours tab in the tools section of the system. 2. The system displays a page containing the next two calendar work weeks with slots that need to be filled with employee names. 3. The manager puts in the names of the employees that she wants to work and when. 4. The manager clicks the Confirm Schedule button on the far right of the page. 5. The system updates the employee schedule database. 6. If there were changes made to existing schedules, the system sends out a notification to the employees. 		
Postconditions: <ol style="list-style-type: none"> 1. New/edited employee schedule is stored in the employee database. 2. Employees are notified via text/email if any changes were made. 		

Use Case Name: System distributes payments	ID: A-4	Priority: High
Actor: Manager		
Description: The system submits approval for employee payments to be distributed.		
Trigger: The calendar work week comes to an end.		
Type: Temporal		
Preconditions: <ol style="list-style-type: none"> 1. The calendar work week is about to expire. 2. The system is designed to distribute salary payments upon expiration and receiving a verification from the manager. 		
Normal Course: <ol style="list-style-type: none"> 1.0 Distribute salary payments <ol style="list-style-type: none"> 1. The calendar work week comes to an end at 11:00 PM on Saturday evening. 2. The employee schedule database is updated. 3. The system sends a notification to the manager asking her to verify the transfer of funds. 4. The manager clicks the verification button in the text/email. 5. The system retrieves data from the salary database. 6. The salary database is updated. 7. The system transfers funds from the Willis Gallery business account to individual employee accounts. 8. The system sends a notification email to the manager that funds have been transferred. 9. The system updates the expenses database. 		
Postconditions: <ol style="list-style-type: none"> 1. The employee schedule database has been updated. 2. The salary database has been updated. 3. The expenses database has been updated. 		

Use Case Name: Purchase virtual tour	ID: A-5	Priority: Medium
Actor: Customer		
Description: The customer purchases an upgrade for their user account to allow for viewing of the gallery virtually.		
Trigger: The customer wants to be able to view the Willis Gallery remotely.		
Type: External		
Preconditions: <ol style="list-style-type: none"> 1. The customer is authenticated by logging into their user account. 2. The virtual tour upgrade option is available on the website. 3. The system can accept and process online payments. 		
Normal Course: <ol style="list-style-type: none"> 1.0 Purchase the virtual tour upgrade <ol style="list-style-type: none"> 1. The customer selects the "account" tab in the options menu. 2. The system retrieves data from the user database. 3. The customer selects the "upgrade to virtual tours" button on the account page. 4. After putting in his financial information, the customer clicks submit. 5. The system displays a popup box asking for confirmation. 6. Once confirmed, the system processes the transaction. 7. Once the transaction has been processed, the system updates the transaction database. 8. The system retrieves data from the transaction database and updates the revenue database. 9. The system updates the user database. 10. The system sends a notification email to the customer thanking them for their purchase. 		
Postconditions: <ol style="list-style-type: none"> 1. The customer can now view the gallery virtually whenever they are logged in. 2. The transaction database has been updated. 3. The revenue database has been updated. 4. The user database has been updated. 		

Fully Dressed Use Cases:

Use Case Name: Schedule upcoming event	ID: A-6	Priority: Medium
Actor: Manager		
Description: The manager schedules an upcoming event for the gallery.		
Trigger: An event has been agreed upon with another party and the manager needs to make sure that staff and their online users/clients are aware of the event.		
Type: External		
Preconditions: <ol style="list-style-type: none">1. The manager has been authenticated by logging into her account.2. The system can accept inputs for upcoming events.		
Normal Course: 1.0 Schedule upcoming event <ol style="list-style-type: none">1. The manager clicks on the schedule events tab in the tools section of the system.2. The system retrieves data from the upcoming events database.3. The system displays a page containing the next calendar month with all scheduled upcoming events and slots for scheduling additional events.4. The manager puts in the name of the upcoming event into that calendar date and then puts in the time it will take place.5. The manager clicks the Confirm Event button on the far right of the page.6. The system updates the upcoming events database.7. The system sends out a notification to all employees of the upcoming event.8. The system sends out an email to all of Jasmine's clients notifying them of the upcoming event.9. Users of the website who selected the option for event notifications also receive an email.		Information for steps: Upcoming event Tool activated Upcoming events details Upcoming event Confirmation Upcoming events details Upcoming events details Upcoming events details
Alternate/Exceptional Flows: 1.1 Cancel upcoming event <ol style="list-style-type: none">1. The manager clicks on the schedule events tab in the tools section of the system.2. The system retrieves data from the upcoming events database.3. The system displays a page containing the next calendar month with all scheduled upcoming events and slots for scheduling additional events.4. The manager selects the upcoming event and clicks the cancel event button on the far right of the page and selects confirm.		Information for steps: Canceled event Tool activated Upcoming events details Canceled event

<div>5. The system updates the upcoming events database.</div> <div>6. The system retrieves data from the upcoming events database.</div> <div>7. The system sends out a notification to all employees that the event has been canceled.</div> <div>8. The system sends out an email to all of Jasmine's clients notifying them that the event has been canceled.</div> <div>9. Users of the website who selected the option for event notifications also receive an email.</div>		<div>Confirmation</div> <div>Uc events details</div> <div>Upcoming events details</div> <div>Upcoming events details</div> <div>Upcoming events details</div>	
<div>Postconditions:</div> <div>1. A new event has been scheduled or canceled and can be viewed on the website.</div> <div>2. Clients and users have been notified of the event or canceled event.</div> <div>3. The upcoming events database has been updated.</div>			
Summary Inputs	Source	Summary Outputs	Destination
<div>Upcoming event</div> <div>Tool activated</div> <div>Upcoming events details</div> <div>Confirmation</div> <div>Canceled event</div>	<div>Manager</div> <div>Manager</div> <div>Upcoming events database</div> <div>Manager</div> <div>Manager</div>	<div>Upcoming events details</div>	<div>Upcoming events database</div>

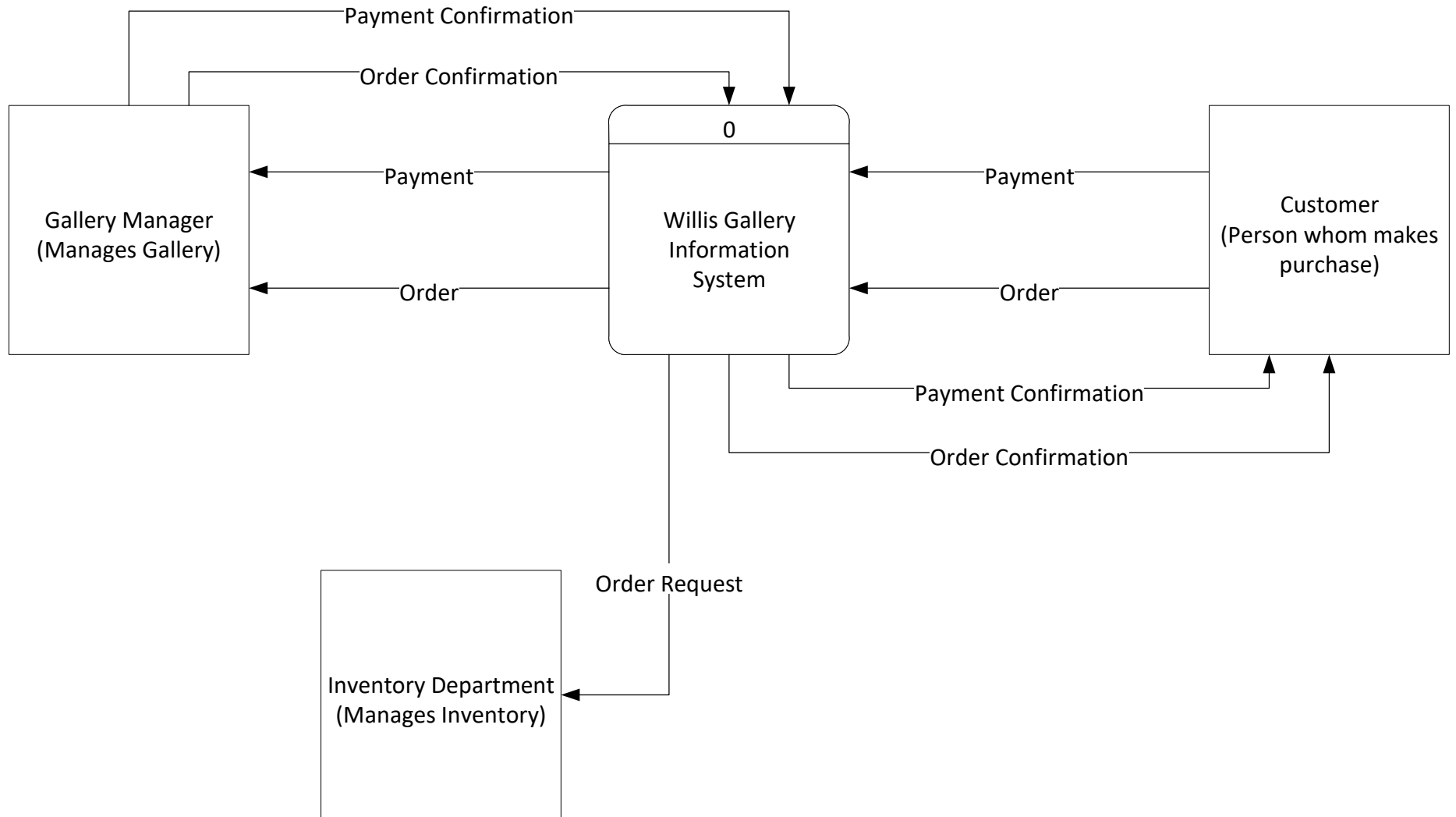
Use Case Name: Confirm sale/final bid	ID: A-7	Priority: High
Actor: Manager		
Description: The manager confirms the final bid, allowing the transaction to be processed.		
Trigger: A bid for a painting is submitted by a customer and the manager is notified.		
Type: External		
Preconditions: <ol style="list-style-type: none"> 1. The manager is authenticated after having logged into her account. 2. The customer is authenticated after having logged into his account. 3. The customer's financial information has been saved and stored in the information system. 4. A bid has been submitted by the customer to purchase a painting during an auction. 5. A link to join the live auction is available on the Willis Gallery website. 		
Normal Course: 1.0 Approve the final bid during an auction. <ol style="list-style-type: none"> 1. The manager finalizes the highest bid for a painting. 2. The system displays a confirmation popup. 3. Once confirmed, the system retrieves data from the user database. 4. The system processes the transaction. 5. The system updates the transaction database. 6. The system updates the revenue database. 7. The system updates the inventory database. 8. The system updates the user database. 9. The system sends an email to the customer containing a receipt for the sale. 10. A notification is sent to the manager verifying the transaction is complete. 		Information for steps: Bid number Confirmation User details User details Transaction details Revenue details Inventory details Transaction details Transaction details
Alternate/Exceptional Flows: 1.1 Method of payment is declined during an auction. <ol style="list-style-type: none"> 1. The manager finalizes the highest bid for a painting. 2. The system displays a confirmation popup. 3. Once confirmed, the system retrieves data from the user database. 4. The system declines the transaction. 5. The system sends a notification to the manager that the transaction has been declined. 6. The system sends a notification email to the customer that the transaction has been declined. 7. The system updates the user database. 8. The system updates the transaction database. 9. The manager reopens bids for the painting. 		Information for steps: Bid number Confirmation User details Transaction details Transaction details Transaction details Transaction details

Postconditions:

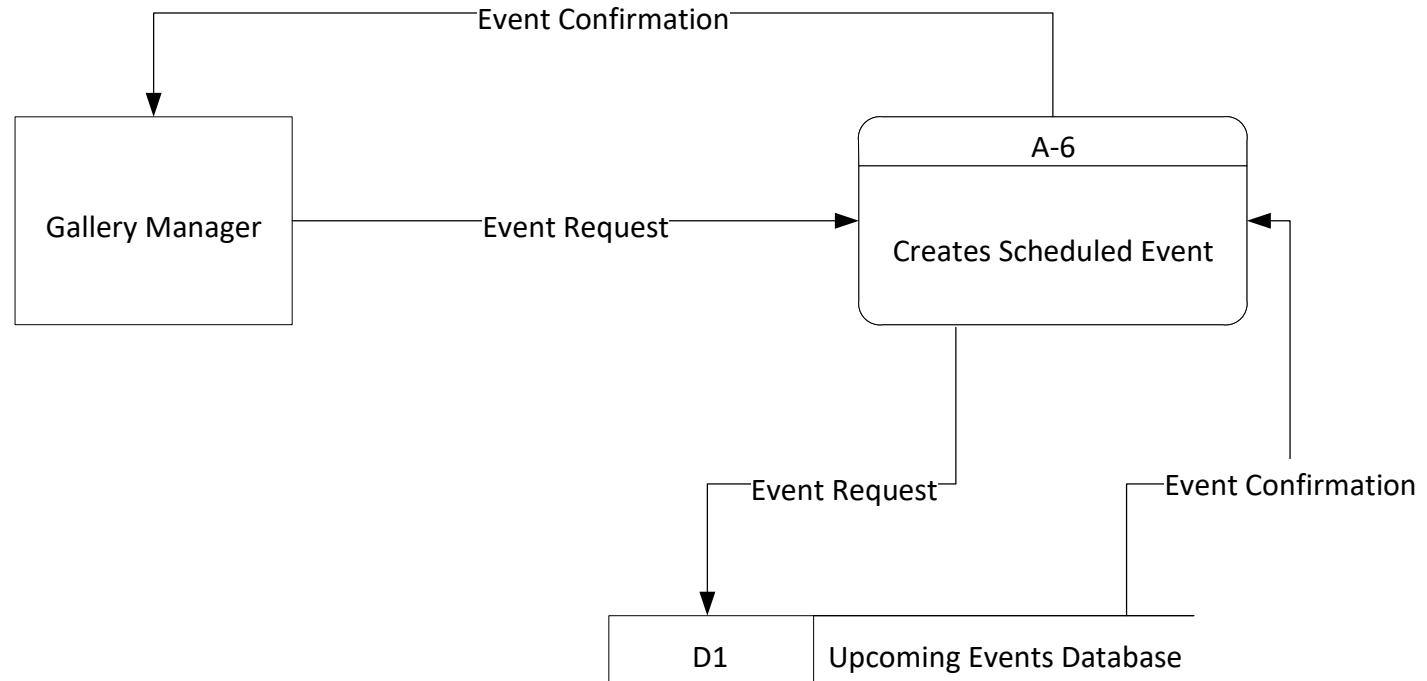
1. The sale of the painting has either been confirmed or declined by the system.
2. The user database has been updated.
3. The transaction database has been updated.
4. The revenue database has or has not been updated.
5. The inventory database has or has not been updated.

Summary Inputs	Source	Summary Outputs	Destination
Bid number Confirmation User details Transaction details Revenue details Inventory details	Customer Manager User database Transaction database Revenue database Inventory database	User details Transaction details Revenue details Inventory details	Transaction database Revenue database Inventory database User database

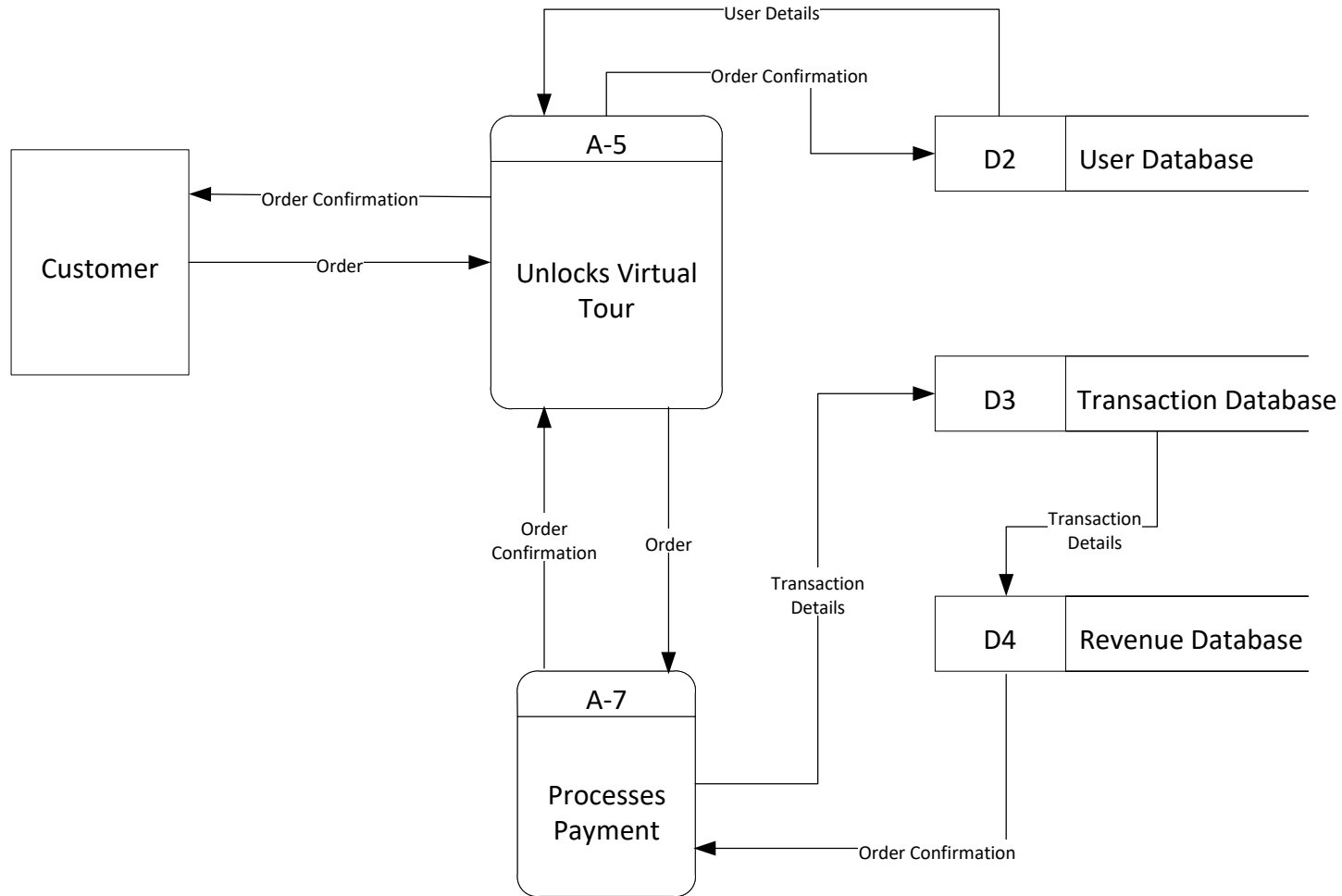
Context Data Flow Diagram



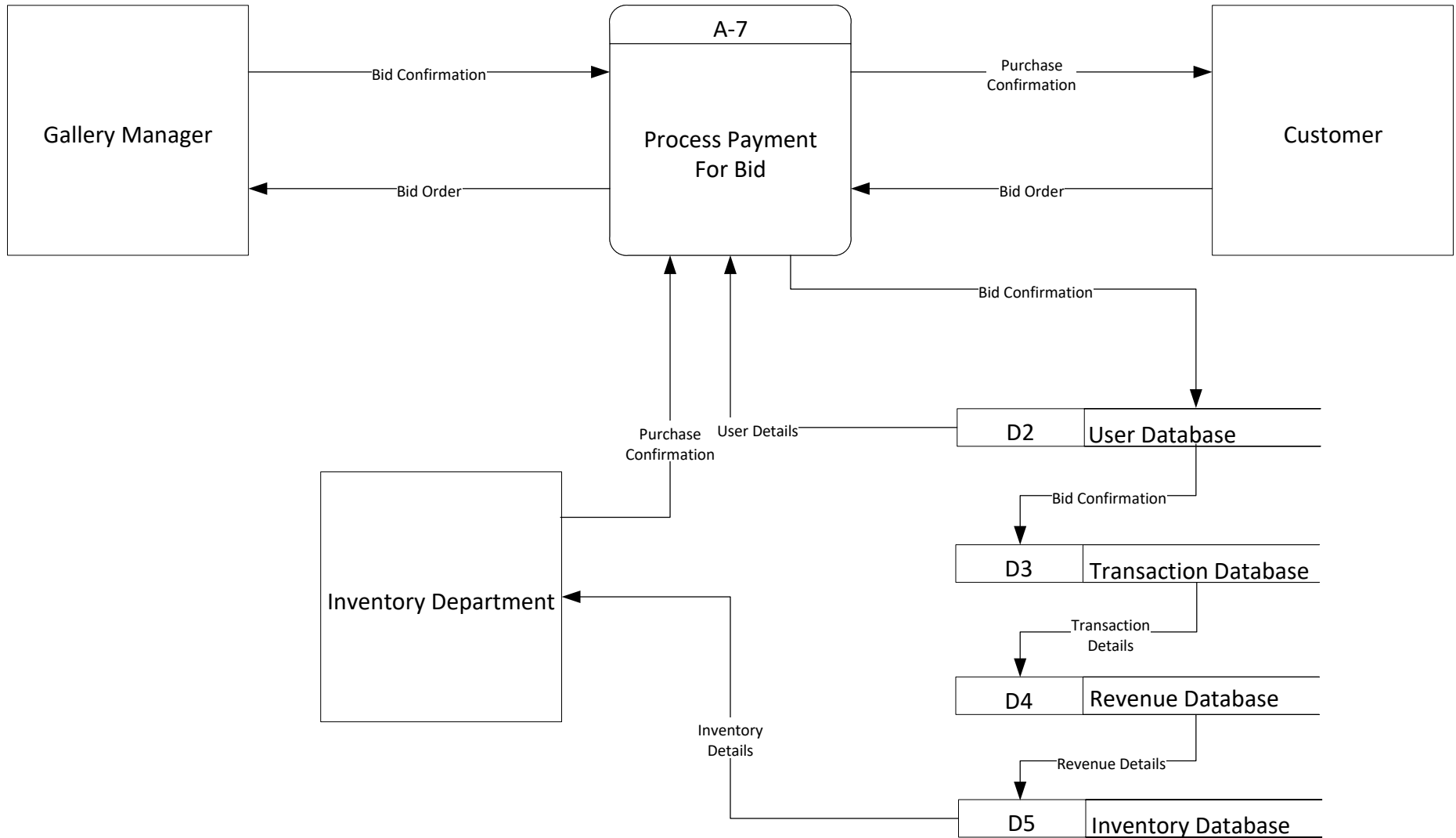
DFD Fragment Schedule Event



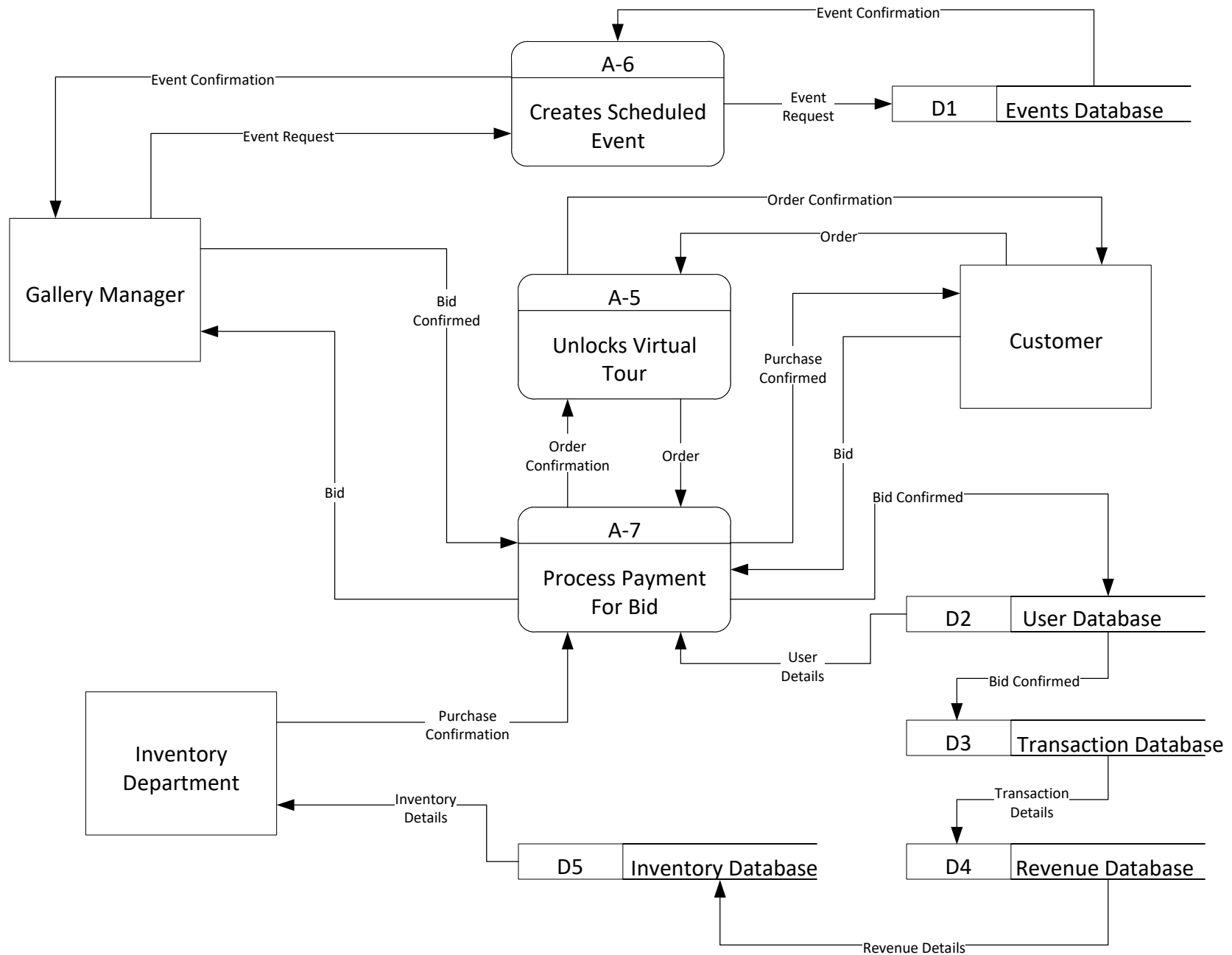
DFD Fragment Purchase Virtual Tour



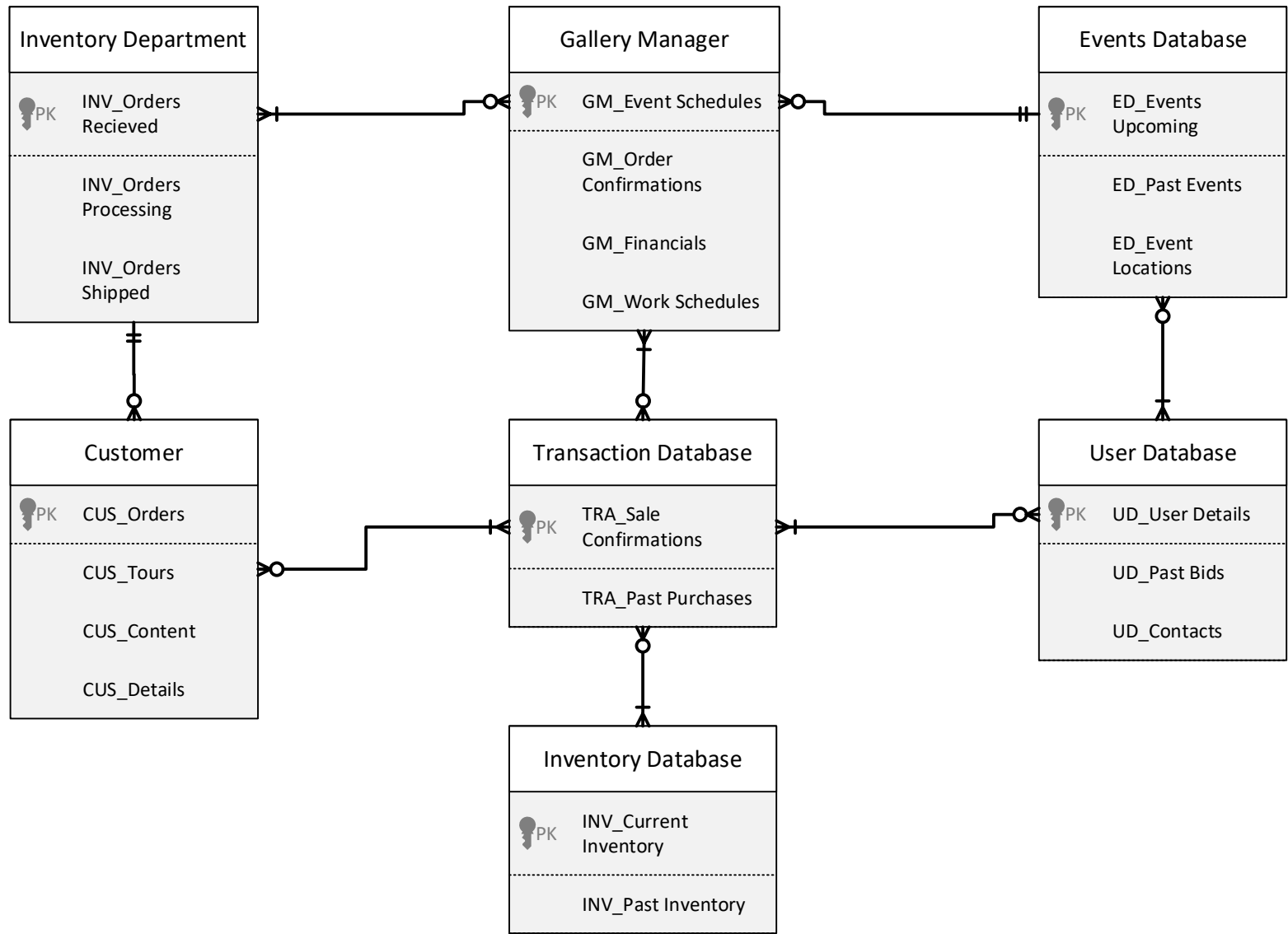
Fragment DFD Confirm Bid Purchase



Level 0 Data Flow Diagram

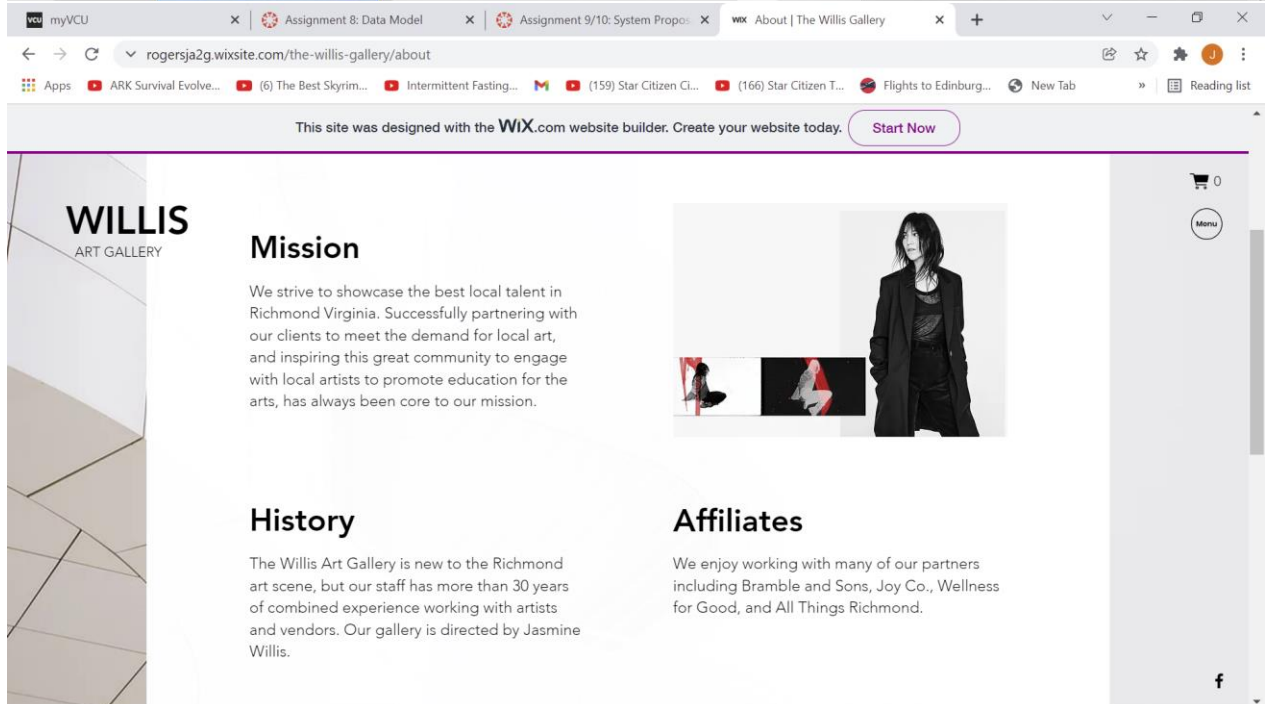
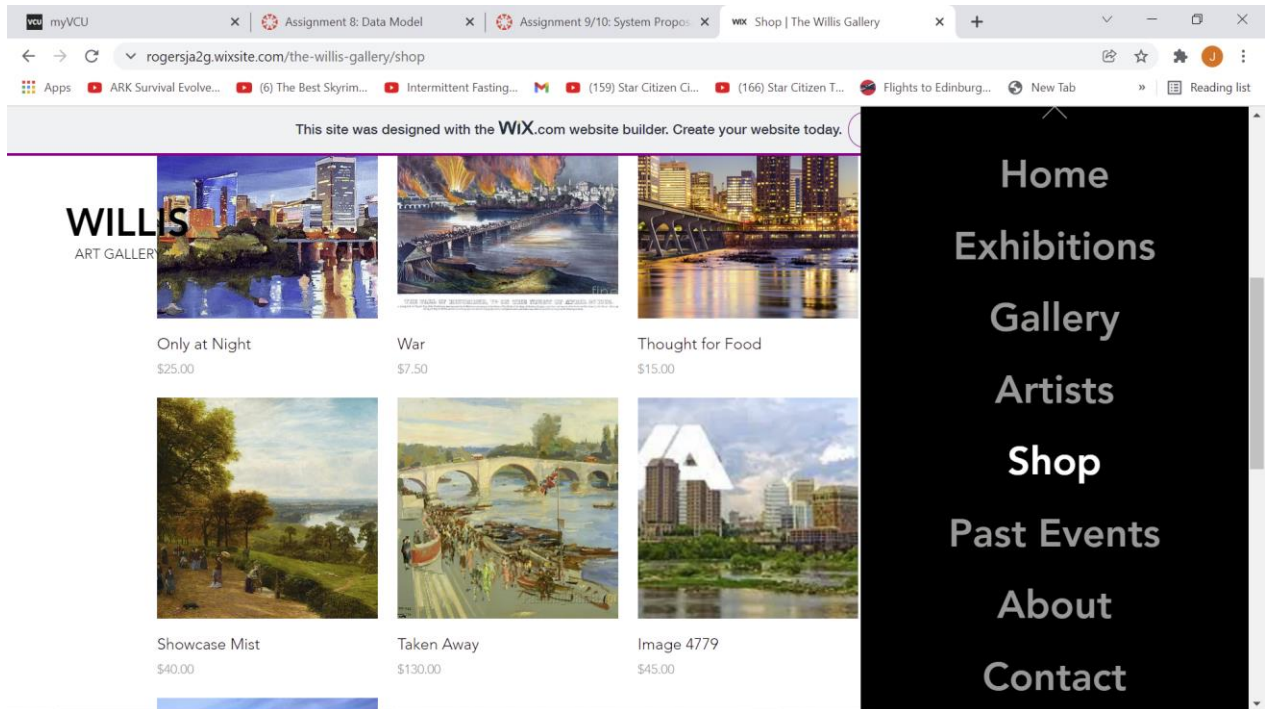


Entity Relationship Diagram



User Interface Prototypes

<https://rogersja2g.wixsite.com/the-willis-gallery>



Usability Test Report

Subjects:

Annie Perrott
Charles Bonadies

Initial Reactions and Comments:

Annie liked the design of our prototype for the Willis Gallery website but had issues with the layout. She made comments on the format of the side panel and thought that the current exhibition panel could be more centered. Charles said that he liked the layout of the website. He said that the website was simple and efficient, and he was able to find everything with no problem. Also, he said he likes the photos and the theme.

Critiques from the Subjects:

Annie's Critiques

- Dislikes the green color and placement of the login prompt
- Believes that the order of our side panel should be Home > Exhibitions > Shop initially to better match how we have the homepage set up
- Chelsea Gibbons is formatted incorrectly in the represented artist's section
- About section should be near the bottom of the side panel near contact

Charles' Critiques

- Front page a little bare
- Believes that adding more graphics or text would help fill the blank space

How we conducted the walkthrough:

We conducted the walkthrough by first allowing the subject to freely interact with the website and explore by themselves. After this initial exploration was concluded, we gave them specific tasks such as locating the newsletter section and adding a print to the cart for online checkout. Our technical tests passed with flying colors and the subject could access all parts of the website they needed to.

We conducted the walkthrough by first allowing the subject to evaluate and explore the website alone. Next, we asked the subject to locate the "Past Events," we then asked them to go to the store and add the picture that they liked the most to the cart. Next, we asked them to remove it from the cart. The subject had no problem completing the tasks.

Any modifications made:

- Changed the location of the login icon and color
- Changed the menu bar to reflect the layout on the homepage
- Reshaped the exhibitions list
- Changed the cart icon and the menu icon to be more expressive

Executive Summary

Throughout the system development life cycle for the Willis Gallery system proposal many deliverables were benchmarked. Our team was tasked to evaluate and present a proposal that would both meet and exceed what the client was looking for. Documented throughout the course of the project, the team established efficient methods for achieving the goals for the system and laying out in detail what we would expect moving forward with the project. A feasibility analysis proved that a system would, indeed, benefit the client and her needs. Requirements for the system were firmly established and use cases were used to analyze how we might consider the functionality of the system and how data would be utilized in the system. Data flow diagrams helped the team achieve a visual ark for how implementation would be fruitful, and an entity relationship diagram was used to specifically spell out what data the team would need to prioritize and store. Finally, several prototypes for the system were developed, including a functional website, that were intended to drive usability testing for further feedback. Corrections were made to the prototypes after receiving feedback.

Moving forward it is our team's conclusion that the implementation of said system for The Willis Gallery should be outsourced to a third party that specializes in website development. The cost would be less bearing for the client and the process would be more efficient. A further analysis before launch is recommended to ensure user satisfaction and a separate analysis of scalability would further benefit the client. Many industries are changing due to pandemic policies, this scenario should not be excluded. The Willis Gallery could potentially see a dramatic increase of users if the system performs as expected. Two training seminars will be held biweekly for the staff before official launch.