SDD/SWDD: Draft Planning Proposal

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Reviewers

- Josiah Greenwell
- Stakeholders

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Functional Description - Cam

Our website will allow users to:

- View About Company
- Contact Company
- Browse/Search for products
- Create An account or login
- Add items to shopping cart
- View items in shopping cart
- Add Payment Info
- Make purchases

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User Interface: Cam

- Systems (Desktop, Phone)
- Not yet created with users (Draft stage)

Wireframes Below

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Data-Driven Prioritization – Kevin

Figure Below

- Google Searches:

Extensive Google searches were conducted to explore existing methodologies, tools, and best practices in data-driven prioritization. This involved reviewing case studies, articles, and blog posts from industry experts, technology companies and thought leaders. Google searches helped identify trends, emerging technologies, and success stories in similar domains.

- Journals and Academic Publications:

Delving into academic journals and publications provided a more theoretical and research-oriented perspective on data-driven prioritization. Scholarly articles on data analytics, decision-making models, and prioritization frameworks informed the understanding of the underlying principles and methodologies endorsed by academia.

- Lab Activity Matrix:

The matrix from the lab activity serves as a crucial reference point, incorporating insights gained from practical exercises. This matrix, likely depicting criteria for prioritization and assigned weights, played a significant role in shaping the methodology. It provided a structured framework to evaluate and compare potential solutions based on predefined criteria. Found at the bottom page.

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Goals & milestones: Cam

Major goals and Milestones the software is going to achieve are:

- Improved User Engagement
  - Implement user feedback and communication data reporting to ensure customers have way to communicate experiences and problems for us to make improvements
- Inventory Tracking System
  - Inventory Database creation so all information on the website is up to date
- Website design and layout:
  - Website layout and design elements for users to be able to easily navigate through website
- Setup Purchase Page
  - Create Purchase page for users to be able to add information and make purchases

Main Stories:
As a user, I want to easily navigate through the website
As a user, I want to learn more about the company on an "about" page
As a user, I want to contact the company
As a user, I want to create an account
As a user, I want to browse all of the products
As a user, I want to add items to my shopping cart
As a user, I want to view items in my shopping cart
As a user, I want to add my payment information
As a user I want to purchase the items in my shopping cart

Current and proposed solutions: Kevin

Research of Existing Products:

- Extensive market research identified several existing solutions catering to the fuel and cargo transportation sector. Notable products include [Product A], [Product B], and [Product C]. Each offers varying features such as route optimization, financial management, and client interaction.

Strengths and Weaknesses:

- [Product A] excels in route optimization but lacks strong financial management features
- [Product B] focuses on client interaction but falls short in comprehensive human resource management.
- [Product C] offers a broad range of functionalities but lacks a robust data-driven prioritization mechanism.

User Feedback:

- Online forums and user reviews highlight common pain points such as suboptimal route planning, inefficient financial management, and a lack of integrated solutions.

Proposed Solution:

User Story: Route Optimization

- As a logistics manager, I want to optimize delivery routes to reduce fuel consumption and delivery time, so that our operations become more cost-effective and efficient.

Roleplaying Scenario:

- The logistics manager logs into the system and inputs delivery locations.
- The system calculates and displays the most efficient route, considering factors like traffic and fuel efficiency.
- The optimized route is sent to the drivers' mobile app for seamless navigation

User Story: Financial Management

- As an accountant, I want to efficiently manage financial transactions and generate invoices, so that our financial processes are streamlined.

Roleplaying Scenario:

- The accountant accesses the financial module to record transactions related to fuel, cargo, and other expenses.
- The system generates invoices for clients based on cargo transportation orders, ensuring accuracy and transparency.
- Financial data is securely stored, providing a comprehensive overview for analysis.

User Story: Client Interaction

- As a client, I want a platform to communicate with drivers for real-time updates and special instructions, so that I can ensure the smooth execution of deliveries.

Roleplaying Scenario:

- The client logs into the system to track ongoing deliveries.
- A communication channel allows real-time updates and the ability to provide special instructions directly to drivers.
- The client receives notifications and communicates seamlessly with the logistics team.

Timeline - Cam

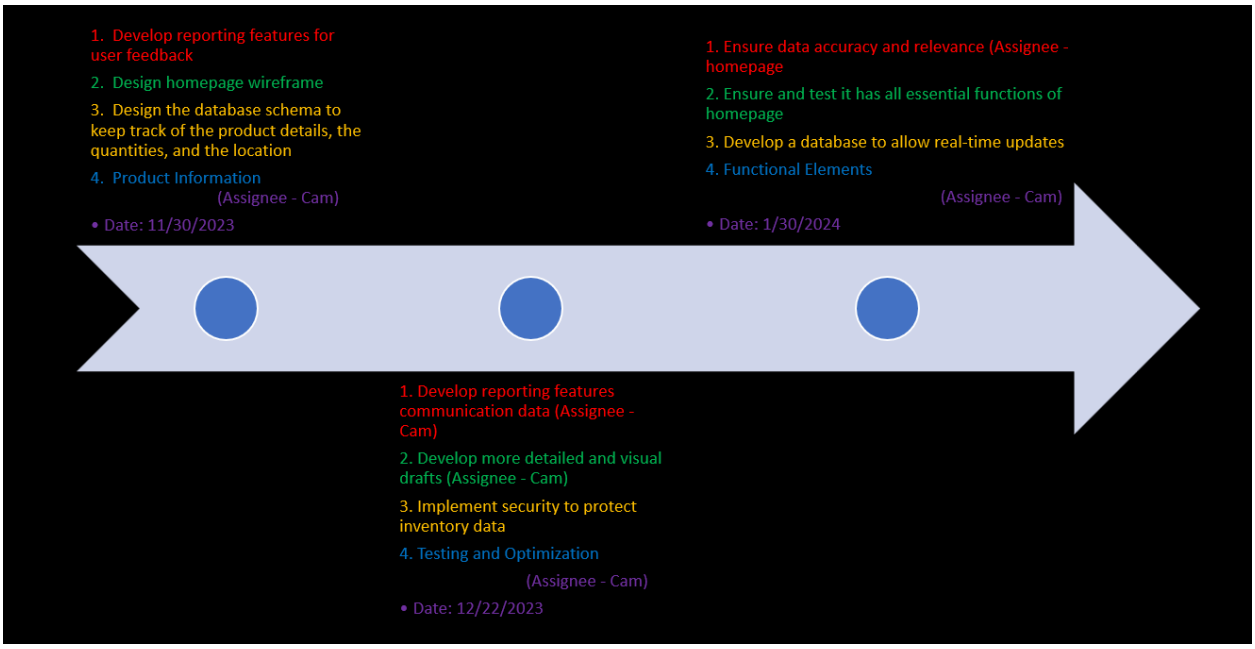
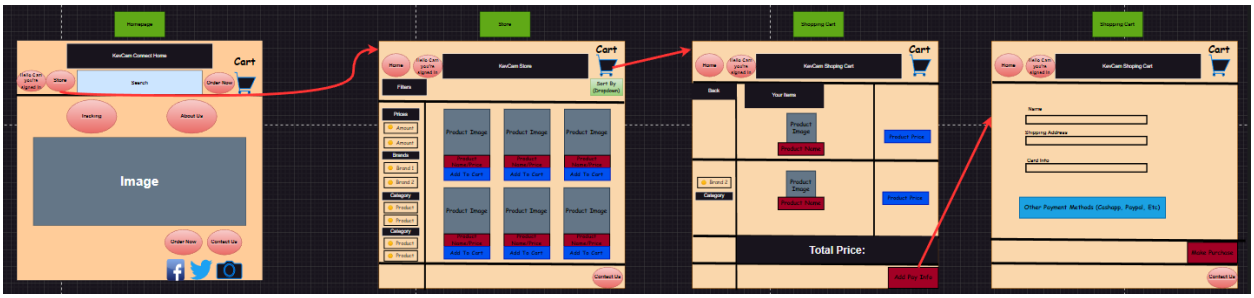
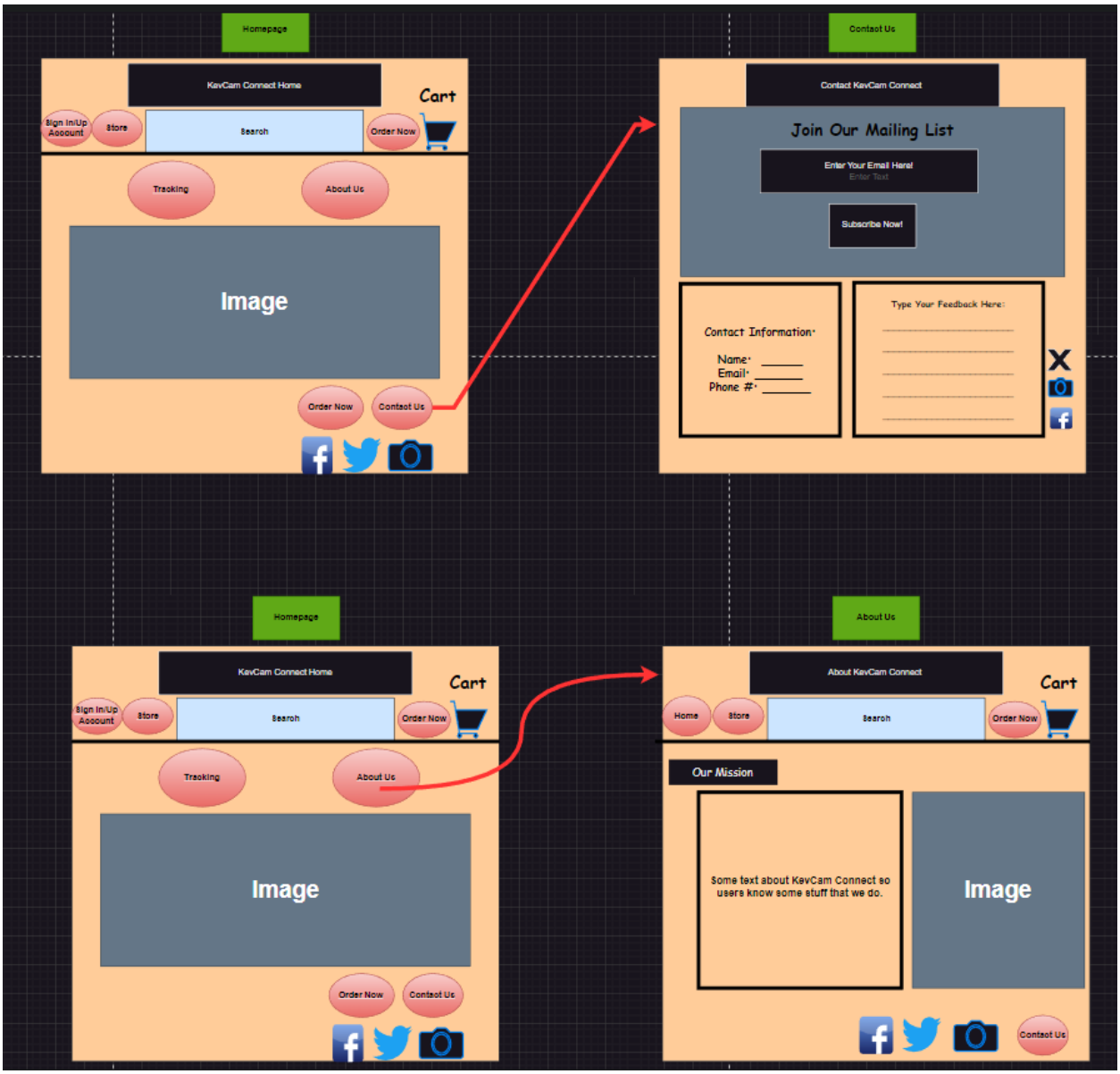
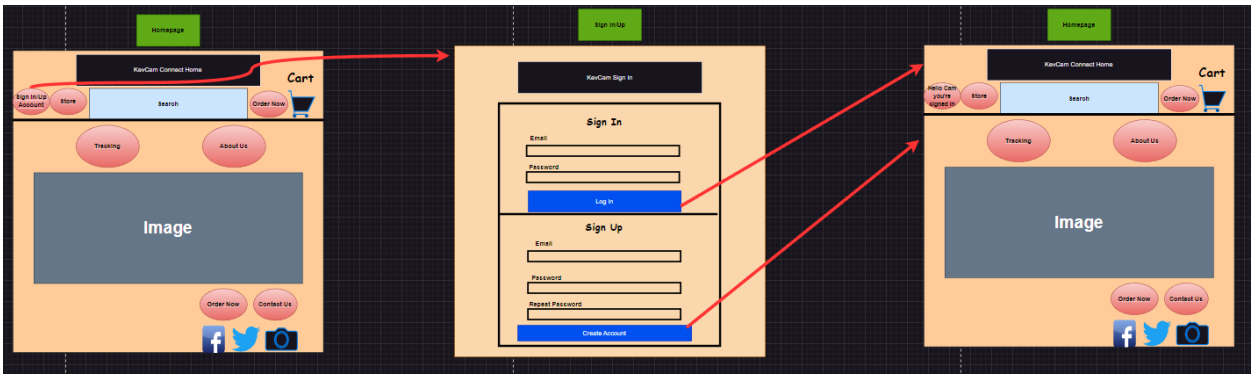


Figure: Wireframes







Data-Driven Prioritization Figure

Figure: Data-Driven Prioritization Matrix

Criteria	Weight (1-5)	Solution A	Solution B	Solution C
Cost Efficiency	5	4	3	5
Fuel Consumption Reduction	4	5	4	3
Route Optimization	4	5	4	3
Real-time Tracking	3	4	5	3
Maintenance Integration	3	4	3	5
User-Friendly Interface	2	4	3	5
Compliance with Regulations	4	5	4	3

- **Criteria Explanation:**
  - **Cost Efficiency:** The cost-effectiveness of the solution.

- **Fuel Consumption Reduction:** Ability to reduce fuel consumption for eco-friendly operations.
- **Route Optimization:** Efficiency in optimizing cargo delivery routes.
- **Real-time Tracking:** Availability of real-time tracking for shipments.
- **Maintenance Integration:** Integration of vehicle maintenance tracking features.
- **User-Friendly Interface:** Ease of use for drivers and logistics personnel.
- **Compliance with Regulations:** Adherence to industry regulations and standards.
- **Weights:**
- Weights are assigned on a scale of 1-5, where 5 indicates higher importance.
- **Solutions A, B, C:**
- Each solution is rated on a scale of 1-5 for each criterion, where 5 is the highest performance.

The matrix visually represents the criteria used for prioritization, demonstrating the weighting assigned to each criterion. This tool aids decision-makers in objectively assessing various options, ensuring that the chosen solutions align with strategic goals and user needs.

Conclusion: The research process, combining practical industry insights with scholarly perspectives and utilizing tools like prioritization matrices, facilitated a well-informed decision-making process. The methodology and tools selected for data-driven prioritization are a result of a holistic approach that balances real-world applicability with established academic principles.