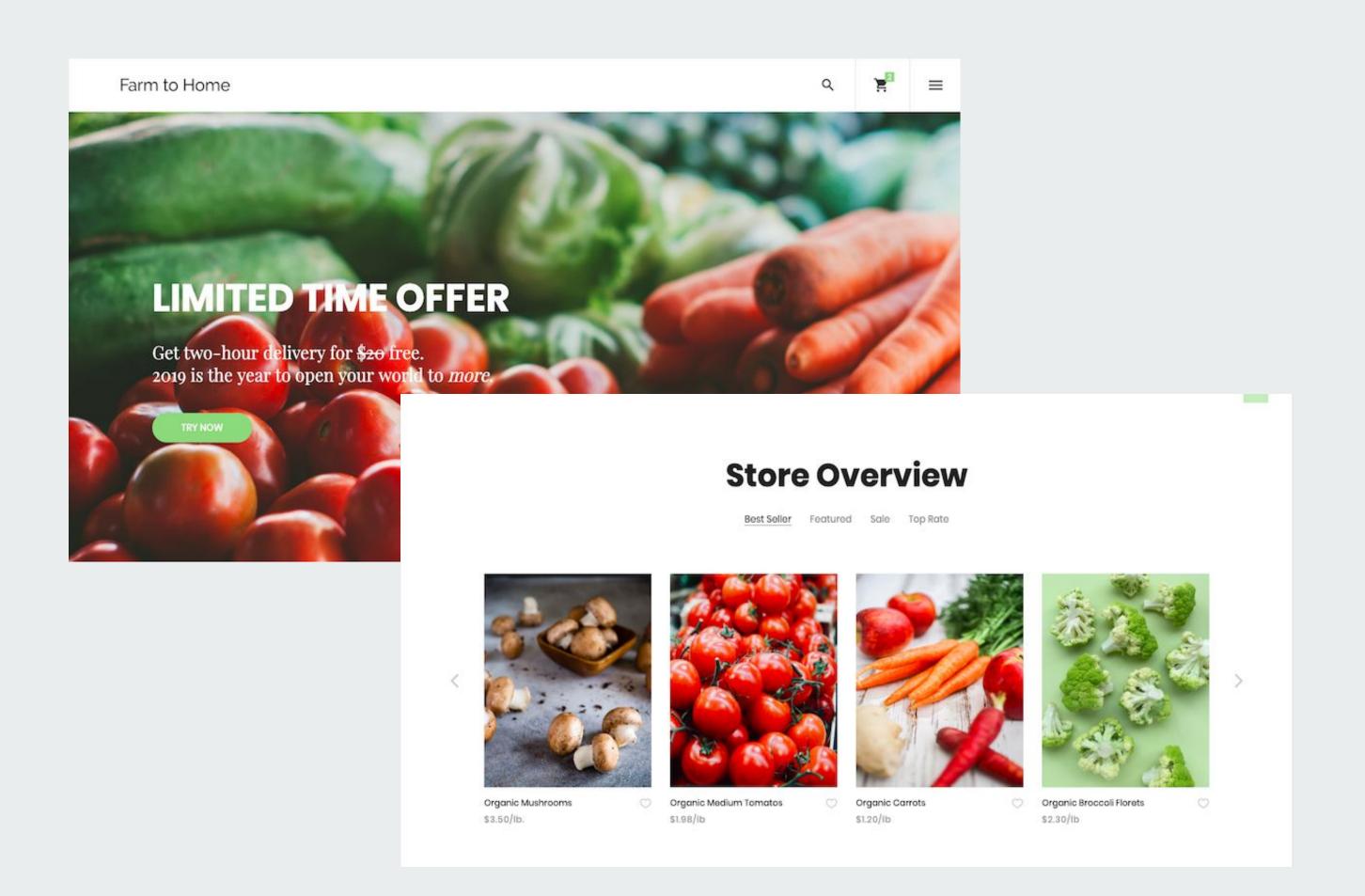
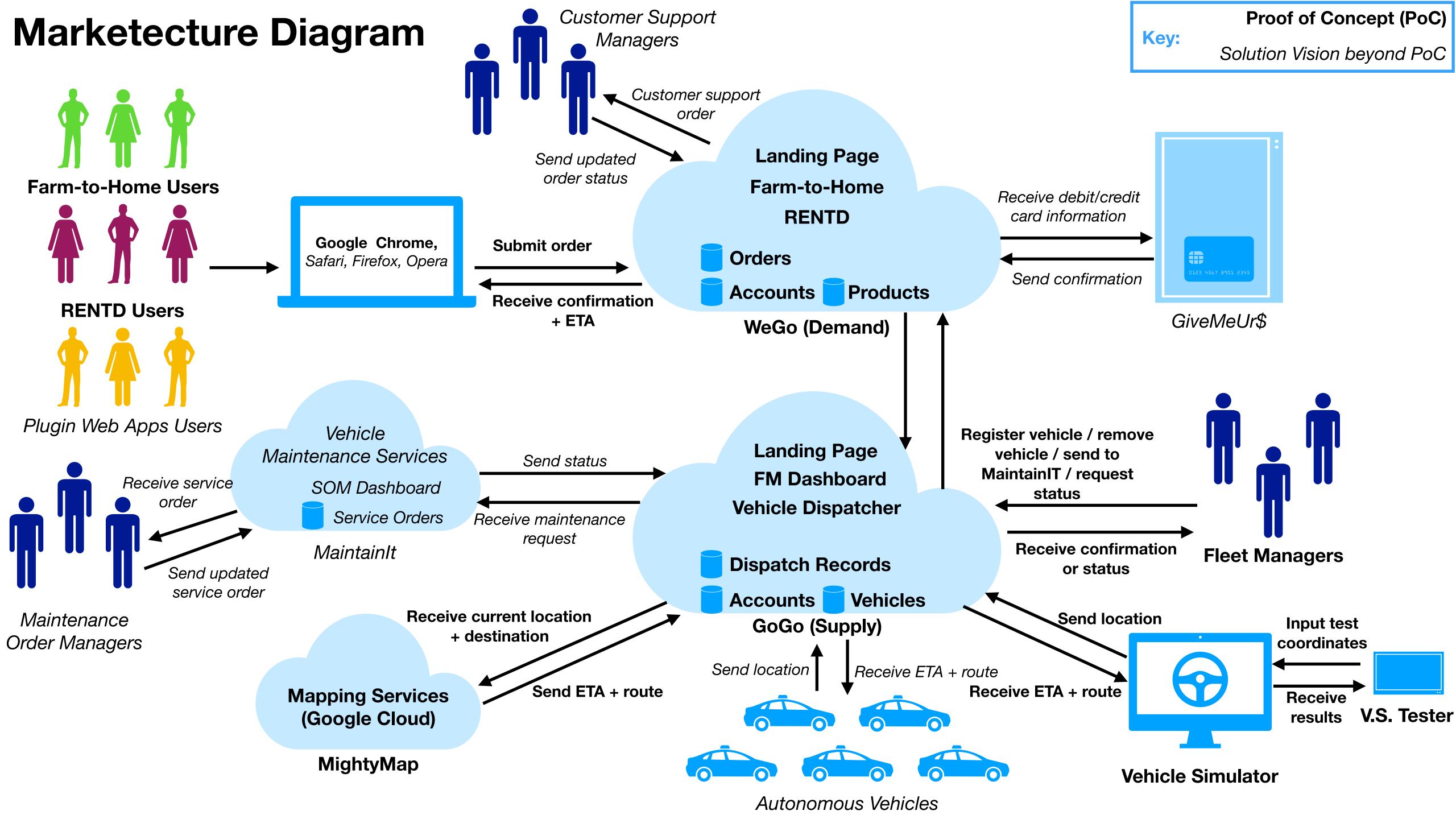
# Team 12 Demo

Alex Box
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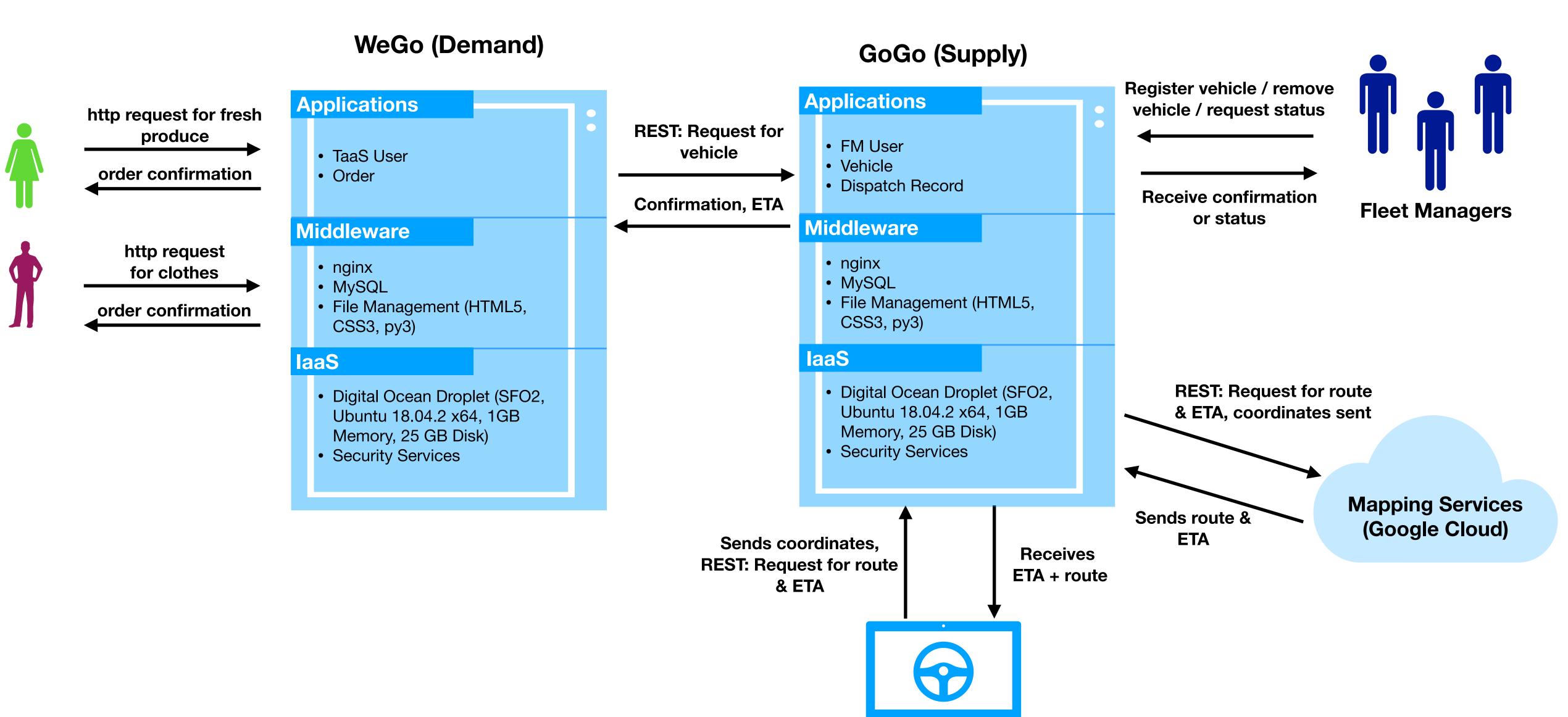


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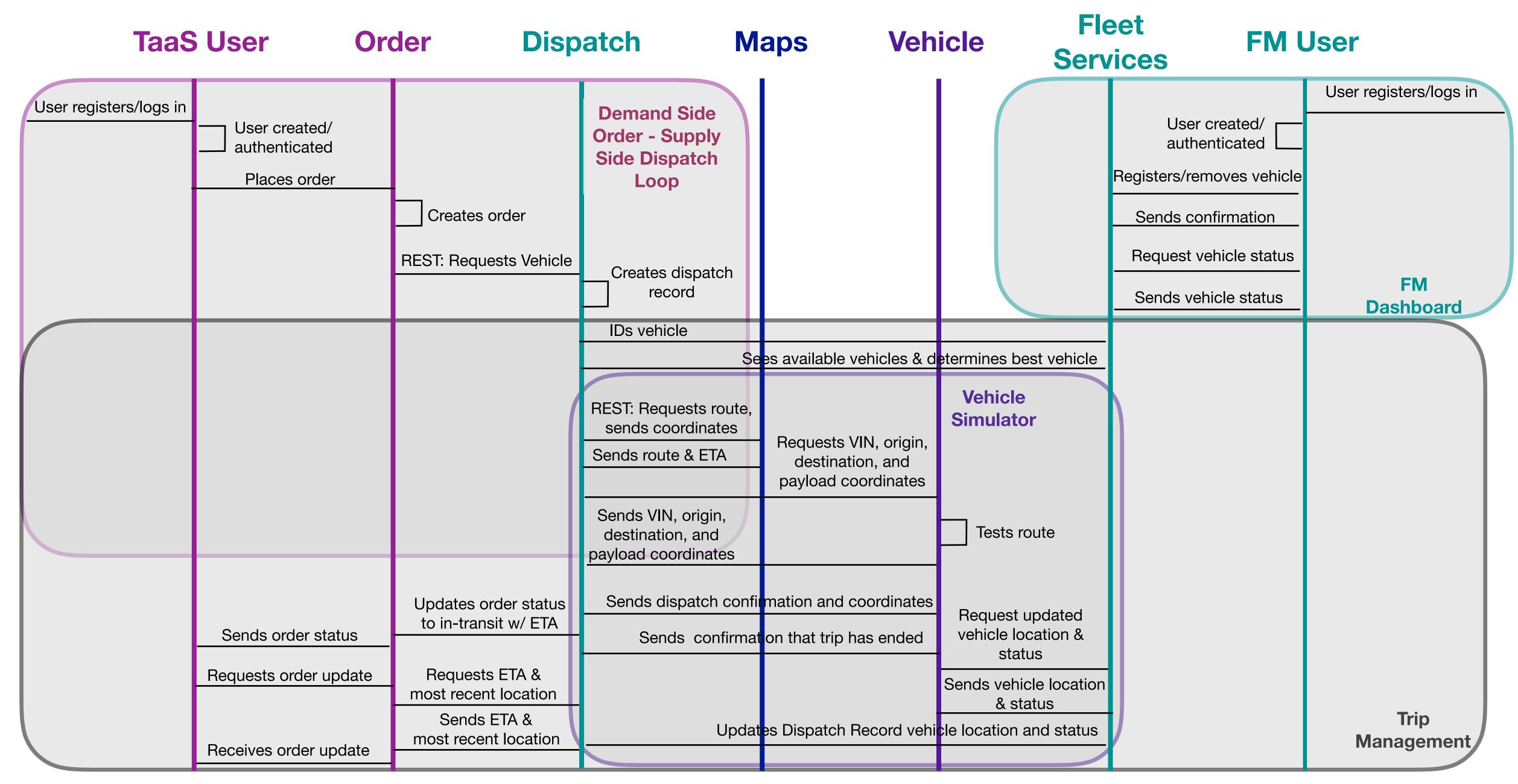
## **System Diagram**



**Vehicle Simulator** 

## Sequence Diagram





## **Platform Canvas**

#### **CUSTOMER SEGMENT**

The Farm to Home TAAS segment of the WeGo POC is meant to solve the issue of supermarket shopping for the busy and health concious people of the world.

By allowing users that range from working moms to businessmen the oppertunity to order produce from local farms, users can be sure that what they're buying is high-quality, but also can get it fast thanks to the TAAS platform utilizing self-driving vehicles.

#### **PROBLEM**

Our customers have no time to shop at their local supermarket, can't always plan out a drive to a store, and have trouble trusting online stores that ship goods from far away locations with little transparency.

Customers are already paying for high-quality produce elsewhere, and are exploring delivery services that offer food, be it fast-food delivery or groceries. This is apparent through services that Amazon or Postmates offer.

#### **ELEVATOR PITCH**

The world is constantly changing and developing, and the many working individuals of today are pushed to keep up with it, spending most of their time divided between their families and work, but never having the time to think about their health, what they're eating, or where it comes from. However, with our Farm to Home service, time becomes irrelevant with this fast and convenient alternative to the supermarket, making ordering locally-sourced and reasonably priced produce easy, so they can focus on what matters while our farms come to them.

#### **SOLUTION**

A perfect solution to TaaS would involve a systematically built web application that would allow the user to navigate products with ease, receive products at their designated location with total accuracy, and ensure that users are notified of developments during the shipping process. The item catalog would be straightforward and intuitive, allowing users to easily add or remove items from the cart. Following the placing of the order, the user would be prompted of the cost of the delivery, the cost of the goods, and be able to review the information or cancel the order before being emailed a receipt. From there, the user could track their delivery until it arrives. Ultimately, the flow of events from when the user orders their goods to when they arrive at the destination should be smooth and should minimize difficulty for the user, creating a positive experience.

#### **EARLY ADOPTER**

This specifc app would best be used by small families, business men and women, or couples. Since the app allows for large shipments, it is possible for a family to purchase produce for the week, or for an individual to purchase something for the day.

Because the app offers locally sourced produce, we would also need to partner with several farms to get access to their crops. In this sense, it may be beneficial to pair with local businesses that work directly with farms or own farms themselves.

#### **EXISTING ALTERNATIVES**

As mentioned in the problem statement, three alternatives would be Amazon, Postmates, and BlueApron. While Amazon and Postmates are well established delivery services for food and other products, BlueApron is a subscription service that delivers customers a wide array of meals every week that contain "farm-fresh" ingredients. This service can also be seen as a direct competitor in terms of quality and whatever existing connections they may have to local farming establishments.

Amazon seems to deliver food in a short amount of time, but fresh produce often lacks in quality. Postmates delivers within the hour from local eateries, but usually not individual ingredients, and is usually very expensive over time. BlueApron seems to be reliable and also taps in the WeightWatchers network, but does not give users the ability to pick what they eat.

#### **DIFFERENTIATORS**

While most of our competitors are spending most of their resources in ensuring deliveries are carried out in a prompt fashion, they do not posses a framework of automated vehicles that can carry out deliveries without fail on their own; they are still utilizing human drivers for all of their delieveries, which leaves them open to human error by those drivers, which means longer delievery ETAs, mishandling of goods, and often times issues with drivers arriving at the wrong address or further away from the delivery location. These are all headaches to the user that we eleminate using automated vehicles, of which no other company is utilizing in this way. Our system is the only system capable of delivering goods from a farm directly to the customer with no middle-men or time spent digging through a warehouse of inventory.

By not only using automated vehicles, but also providing users with high-quality produce and the ability to order online anytime from anywhere, the service's features not only cut down on pain points, but also increase the amount of time users have for themselves. While we create this value for the user, they are more inclined to come back to the app and look to it for last-minute shopping and daily use or meal planning, and that is how the app becomes a reliable service and a household name.

#### KEY SUCCESS FACTORS

Success with undoubtedly be tracked by new customers and revenue, as well as general usage by existing customers.

Some important metrics would be how many customers actually join/purchase from the app after registering, as well as how much users spend on average and on what products.

The solution we're adopting is not easily copied, as it requires the autonomous cars, relationships with local farmers, and high-quality produce delievered faster than by a human driver.

We will acquire customers with special promotions on popular products, retain them with fair prices and efficient support, and upsell them by discounting delivery with large purchases.

#### **KEY PARTNERS**

Marketing and Sales is the best department to partner with, as they can drive home the purpose and appeal of the app to the masses.

Leaders in Operations, Product Development, and our CEO are going to be valuable partners throughout the lifecycle of the app, and need to be convinced that it's a good idea, as they all ensure that funding, design, and maintenance run smoothly.

There also needs to be a way to make partnerships with local farms, whether that requires a contract or not, so that WeGo can have exclusive ties with local farmers for the purposes of the app.

#### REVENUE

This app will charge various amounts for the products available, depending on quantity. Like most stores that offer produce, these prices can range anywhere from \$4 and item to \$40 depending on quantity, supply, and demand. The most beneficial revenue will come from a stream of delivery charges of \$10+, as well as optional delivery insurance charges at \$10 for any order below \$100, with the price rising by \$5 increments for every \$25 spent.

In the future it may also be beneficial to revenue to include the option to allow a user to subscribe to an order, and have the order shipped weekly, bi-weekly, or monthly at the listed price.

#### COST

Since the website is still in the POC stages and will initially be using free methods of hosting, cost will be relatively low to start and possibly for the pilot stage. However, as the service goes to market, costs will arise in terms of paying farmers, autonomous vehicle maintenance, and web hosting. These will most likely become regular monthly or yearly charges. Specifics are still TBD.

# User Experience Map

	LOGIN	INVENTORY	SELECTION	CHECKOUT	SHIPPING	WAITING	DELIVERY	FOLLOW UP
Doing	User opens website, logs in or registers.	User selects produce delivery service and is directed to a product selection screen.	User is shown items, selects quantity, adds them to the cart.	User reviews cart, adds delivery location, checks out, and is given the opportunity to review a receipt and cancel order	Receipt is emailed to user if they didn't cancel, and vehicle is shown on map screen with route and delivery ETA	User waits for delivery	User gets a notification that vehicle has arrived and meets the vehicle outside, gathers their goods	User is prompted to fill out a small survey about the service
Thinking	Why this service? What can I find here? How much will this cost?	What do I need to buy? Where does X come from?	How much of X do I need?  Can I afford this?	Where do I need this to go?  How long will it take?  How do I cancel my order?	What do I do now?  How far away is the vehicle?	What else can I do before the delivery arrives?	What condition are my goods in?  Does anything look damaged?	How long did the delivery take?  Was this worth my money and time?
Feeling	Interested - A new service to use.  Nervous - I don't want to spend too much.	Curious - I'd like to see what they offer here.  Cautious - I want to know where my food comes from.	Accomplished - I'm getting a lot of work done.  Excited - This process is easier than going to the store.	Unsure - I'm not sure I have the right location.  Content - This receipt looks correct.	Excited - My groceries are on the way!  Surprised - The delivery time is so short!  Trusting - My goods are coming from a real farm!	Focused - Let me take care of some tasks in the meantime.  Anticipation - I'm not sure what the items will looks like.	Satisfied - Everything looks great and is how I expected it.  Trust - I feel like I can use this service again.	Grateful - This was helpful, I'll write a positive review.  Critical - Let me provide feedback on what I didn't like.
Pain Points	Slow login time  Registration process is a waste of time	Too wide of a selection to find a product  Information about products is hard to find/navigate	Having to remove an item from cart to adjust quantity	Complicated checkout process  Difficulty setting delivery location  Difficulty cancelling order	Incorrect delivery location displayed  ETA is incorrect or unreasonable based on route  Vehicle's location is incorrect	Delivery taking longer than expected, or an unreasonable amount of time	Vehicle doesn't arrive at correct delivery location Goods are damaged or unorganized	Survey is not related to user experience or uses loaded questions
Opportunities	Streamline website to allow for easy login	Make sure prices and descriptions are clear to avoid confusion	Make cart system very simple for the user  Use items in cart to suggest other products	Can gather information based on reason for cancellation of order	Email can contain additional information, such as delivery location and ETA	Send user periodical updates on delivery status or display step in the shipment process via a graphic	User should be able to see where the car is and confirm the delivery arrived.	Survey should be able to pull information like whether the user thought the delivery took too long.

## Personas



Name: Joyce

Age: 34

**Gender: Female** 

**Occupation: Teacher** 

Annual Salary: \$45,000

City: Austin, TX

#### **Key Differentiators**

- Working mom Joyce is a working mom that seeks the best value she can get with the money she earns; every penny counts.
- Health conscientious Joyce has kids, and wants to always provide healthy and safe food for her kids.

#### Personal Profile and Additional Details

Joyce is a full-time English teacher at a local middle school, and doubles as an amateur chef at home. She loves to cook for her kids, but as a single mom she rarely has the time to shop. Putting her family and its health first, she's constantly researching new services that provide healthy ingredients she can use in her cooking.

#### **Goals**

Joyce wants to use a website that can help her find and purchase locally sourced ingredients without taking much time away from her job or her kids, as she can't be driving around to pick things up or browse store shelves. She appreciates a simple and easy-to-navigate layout, and responds better when she knows exactly where products are coming from.

#### **Needs**

- Reasonably priced, healthy produce and ingredients
- Fast delivery time (same or next day)
- Easy-to-understand receipts
- Delivery reminders

#### **Pain Points**

- Expensive products
- Confusing and slow websites
- Not knowing where products come from
- Shipping delays



Name: Thomas

Age: 65

Gender: Male

Occupation: Businessman

Annual Salary: \$80,000

City: Seattle, WA

#### **Key Differentiators**

- Big Spender Thomas doesn't care about how much he spends as long as he's getting a quality product.
- Lone Wolf Thomas lives alone, so he does things in his own time; doesn't care much about shipping dates.

#### **Personal Profile and Additional Details**

Thomas is a businessman that has a hard time committing to his own shopping plans. While he's very busy on a day-to-day basis, shopping online is always more convenient for him than going to an actual store, as he can never pin down a time and date to go. Thomas is very excited to find a website that can be a one-stop-shop for all of his grocery needs, regardless of the price. Given that he's getting older, he's concerned about where things come from, and believes locally-sourced products may fair better than what's at the supermarket.

#### Goals

Thomas wants to participate in a no-nonsense service that can simply provide him with quality food products without him having to go and shop for them himself. As long as it comes to his doorstep and he doesn't need to do a whole lot to get it there, he's happy. He appreciates a streamlined and simple approach to an online storefront, and doesn't want to get caught up in a site's features.

#### **Needs**

- High quality, local produce and ingredients
- Easy website and inventory navigation
- Easy-to-understand shopping experience
- Accurately routed delivery locations

#### **Pain Points**

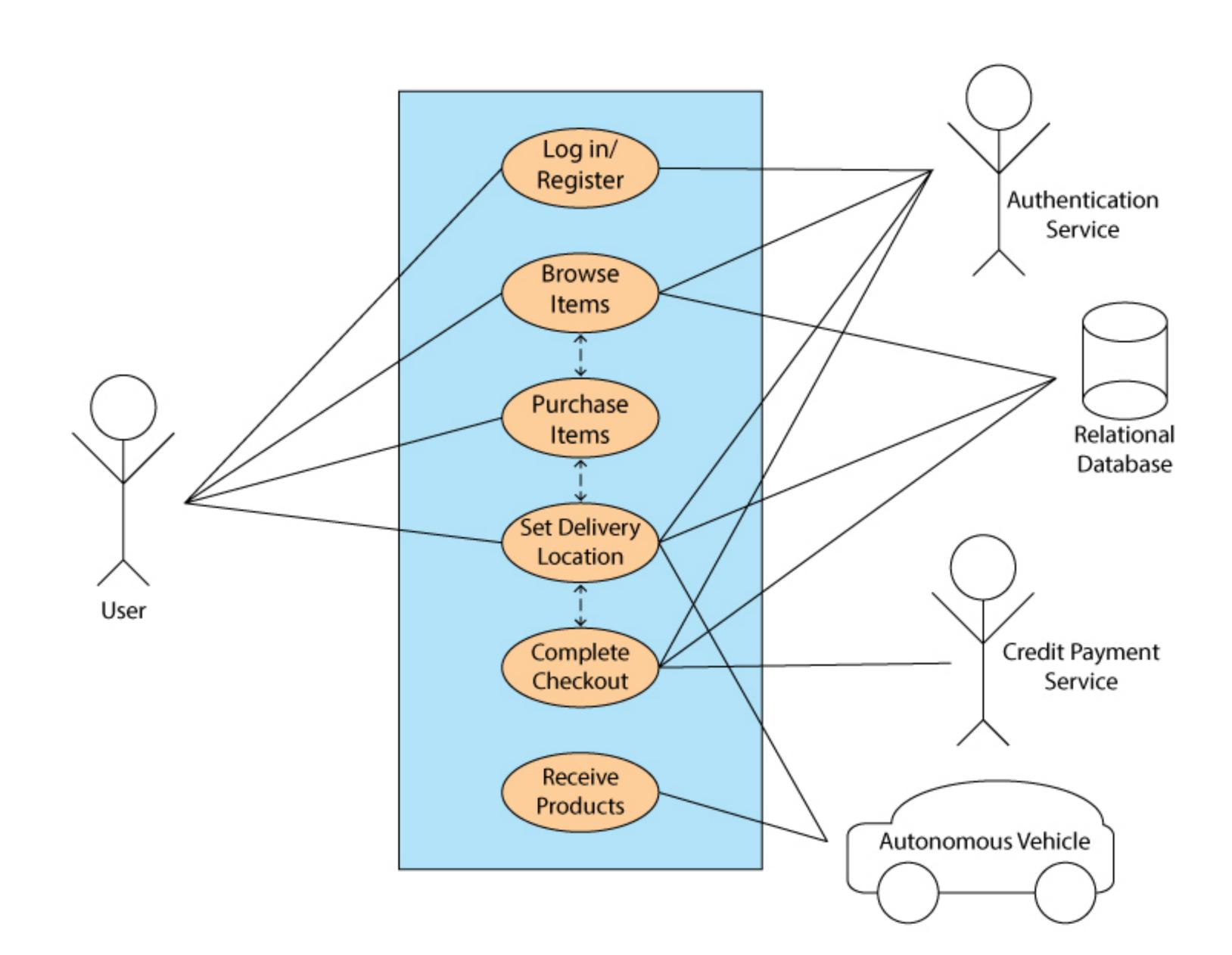
- Confusing and slow websites
- Complicated checkout procedures
- Deliveries going to the wrong address
- Crowded layouts

## **Pain Points**

- Confusing and slow websites
- Complicated checkout procedures
- Deliveries going to the wrong address
- Crowded layouts
- Expensive products
- Confusing and slow websites
- Not knowing where products come from
- Shipping delays
- Follow-up survey is not related to user experience or uses loaded questions
- Vehicle doesn't arrive at correct delivery location
- Goods are damaged or unorganized

- Delivery taking longer than expected
- Incorrect delivery location displayed
- ETA is incorrect or unreasonable based on route
- Vehicle's location is incorrect
- Complicated checkout process
- Difficulty setting delivery location
- Difficulty cancelling order
- Having to remove an item from cart to adjust quantity
- Too wide of a selection to find a product
- Information about products is hard to find/navigate
- Slow login time
- Registration process is a waste of time

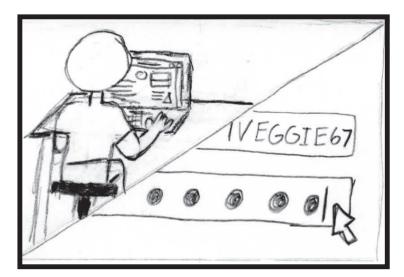
## **Use Case Diagram**



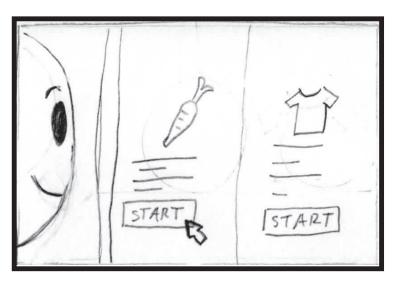
## Scenario

	LOGIN	INVENTORY	SELECTION	CHECKOUT	SHIPPING	WAITING	DELIVERY	FOLLOW UP
Actions	Joyce opens website and looks at the home page. She navigates to the registration page, enters her information, and then proceeds to the login page.	Joyce selects produce delivery service and is directed to a product selection screen. Based on what she sees as she browses, she decides she wants to order 2 sets of carrots, 1 gallon of milk, and 2 dozen eggs.	After reading the product descriptions and verifying that she wants them, Joyce adds each item to her cart with the appropriate quantity.	Joyce goes to the checkout screen, reviews her items, and approves them. She enters her credit card information, a delivery address, and is given a receipt to review.	Joyce checks the receipt and accepts the order price. She's redirected to a order status page with the autonomous vehicle displayed on a map as it gathers the products she ordered. An ETA is displayed beneath a progress bar.	Joyce steps away from her computer and tends to her children. She gets distracted and forgets about the delivery for a while.	The website sends Joyce a notification that her delivery has arrived, the progress bar on the webpage is full, and the map shows the car is right outside her house. Joyce goes outside, gathers her items, and goes back into the house.	The website prompts Joyce to fill out a quick survey about her experience with the website. She rates the products she bought, as well as the delivery process.
Questions	What is going to be on the homepage? A mission statement? A big login button? What makes it the most accessible?	Will items be sorted by type or will there be options that let the user sort by different categories?	How should product descriptions be displayed? Should they be right next to the item, or does the item need its own page?	Should users be able to adjust quantity before/during checkout?  Should the delivery address be tied to the user's account once they've entered it?	How will she know when a step is completed?  What happens if she leaves the website?	What service does the website provide when she's not actively on it? Does she get notifications at each step? When the vehicle is 30 minutes away?	What if products are damaged or in bad condition? What does she do with them?	What benefit does Joyce get from filling out the survey?
Comments	The layout of the website is going to be key to bringing in users. It needs to be simple and welcoming.	Allowing users to search via keyword or browse a couple categories such as "Dairy" and "Produce" might be helpful for the user.	Having the product description next to an image of the product might be the simplest way to organize the information.		Process should run in the background and users can come back to the site to check on an order at any time.	We don't want to intrude on users, so notifying users when products are on their way is a good idea, but maybe that is the limit.	Vehicle location upon delivery needs to be very accurate, don't want a car down the street from the drop-off point.	
New Ideas		Maybe each category should be its own tab within the website?		Maybe the address should come first during the registration process and be tied to the user's login info.			Users should be able to return items via the delivery vehicle if they are unsatisfactory, followed by a refund of said items.	Users should have the chance to earn, or just earn, a 10% discount in their next order by filling out the survey.

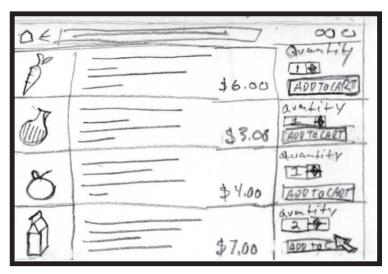
## Storyboard



Bob heads to the WeGo Website, and logs in to his account with his username and password.



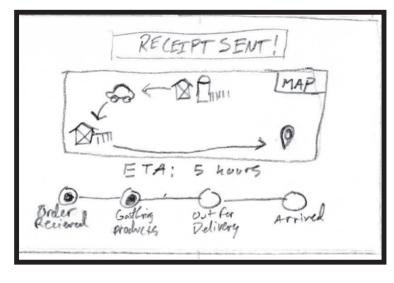
Bob is on the main page of WeGo services, and selects the Farm to Home option.



Bob is redirected to the inventory screen of the Farm to Home service. From here, he finds the products he wants, selects the quantity he needs, and adds it to his cart.



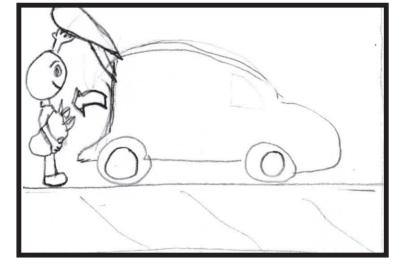
After selecting all his items, Bob heads to the checkout screen, reviews his receipt, adds in his address for delivery, and accepts the charges.



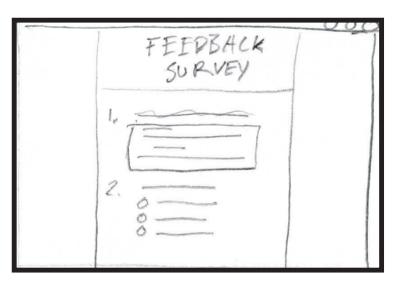
Bob's receipt is sent to his email and a map is displayed showing the location of the delivery vehicle in real time, with an ETA and progress bar below.



Bob decided to play some games in his spare time, and gets a notification on his computer when the delivery arrives at his location.



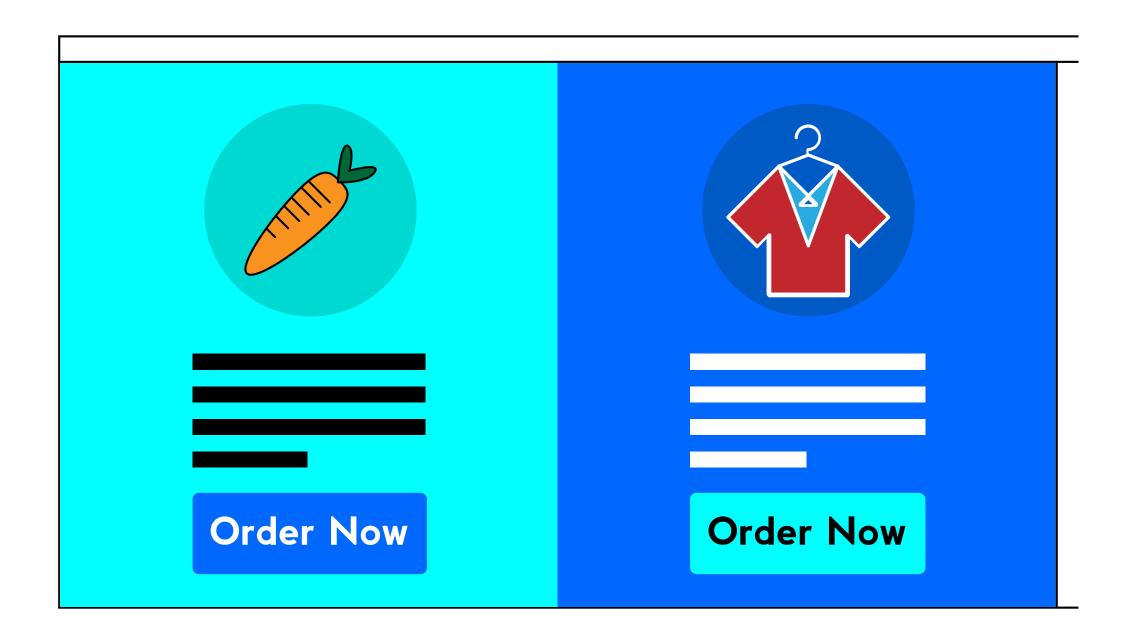
Bob heads outside to the delivery vehicle, opens up the trunk area, and gathers his goods.

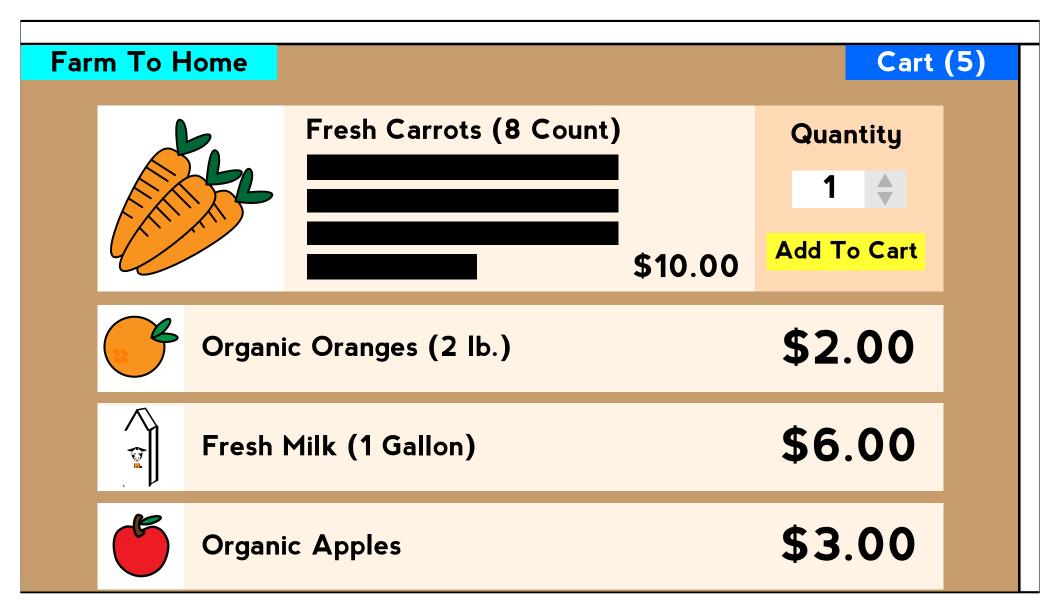


Later, Bob is asked to confirm that he has received his goods and is given the oppertunity to fill out a short feedback survey about his experience.

## **Prototype**







## **Prototype Continued**

