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Project Title: Athlete Tracker

Project Summary: A program that allows brands to internally track products sent to sponsored athletes.

Project Requirements
Business Requirements

ID	Requirement	User	Priority
BR-01	Need a system to track and report products sent to sponsored athletes	All	Critical
BR-02	Admins should be able to add new products	Admin	High
BR-03	Admins should be able to edit existing products	Admin	Medium
BR-04	Admins should be able to delete existing products	Admin	Medium
BR-05	Admins should be able to add new athletes	Admin	High
BR-06	Admins should be able to edit existing athletes	Admin	High
BR-07	Admins should be able to delete existing athletes	Admin	Medium
BR-08	Admins should be to view a list of shipments, their value, and when they were sent to a specified athlete	Admin	Medium
BR-09	Athletes should be to view a list of shipments, their value, and when they were sent to them	Athlete	Low
BR-10	Warehouse workers should be able to view a list of shipments,	Warehouse worker	Medium

	their value, and when they were sent to a specified athlete		
BR-11	Admins should be able to log a new shipment entry which specifies what product(s) were sent when and to which athlete	Admin	High
BR-12	Athletes should not be able to view other athletes' information	Athlete	High
BR-13	All data should be loaded/displayed in real-time to prevent concurrent editing issues	All	Very low / nice-to-have

User Requirements

ID	Requirement	Topic Area	User	Priority
UR-01	Admin should be able to view the total value in product sent to a specified athlete	Dashboard	Admin	Medium
UR-02	Athletes should be able to view the total value in product they have received	Dashboard	Athlete	Medium
UR-03	Users should be able to log in	Log-in	Athlete	Critical
UR-06	All users should have a portal to access and modify information	Dashboard	All	High
UR-07	Admins should be able to search for an athlete by name	Dashboard	Admin	Nice-to-have
UR-08	Warehouse workers should be able to search for an athlete by name	Dashboard	Warehouse worker	Nice-to-have
UR-09	Warehouse workers should be able to view a list of shipments needing to be shipped	Dashboard	Warehouse worker	High
UR-10	Warehouse workers should be able to update a shipment's status (pending, shipped, etc)	Dashboard	Warehouse worker	High
UR-11	Users can retrieve lost passwords after verifying identity	Authentication	All	Nice-to-have

Functional Requirements

ID	Requirement	Topic Area	User	Priority
FR-01	System can calculate the total value in product sent to an Athlete over a specified time period	Metrics	System	Nice-to-have
FR-02	Users can log-in to a portal session using a set username and password	Authentication	All	High
FR-03	New products can be added to the database	Database	Admin	High
FR-04	Existing products can be edited	Database	Admin	Medium
FR-05	New athletes can be added to the database	Database	Admin	High
FR-06	New athletes can be given access to the system	Authentication	Athlete	High
FR-07	Athlete information can be edited	Database	Athlete / Admin	High
FR-08	System can email users to reset password	Authentication	All	Nice-to-have (stretch)

Non-Functional Requirements

| ID	Requirement	Topic Area	User	Priority
NF-01	Users should not be able to access another user's data, including authentication data	Security / Privacy	All	High
NF-02	The portal should be accessible from any operating system	Portability	All	High
NF-03	The portal should be accessible from any size	Portability	All	Medium

	device (responsive design)			
NF-04	Portal should be easy to use	Accessibility	All	High
NF-05	User passwords should be securely stored and accessed (salted & hashed)	Security	All	Critical

Use Cases

Actors
- Admin
- Athlete
- Warehouse Worker

Use Case Overview
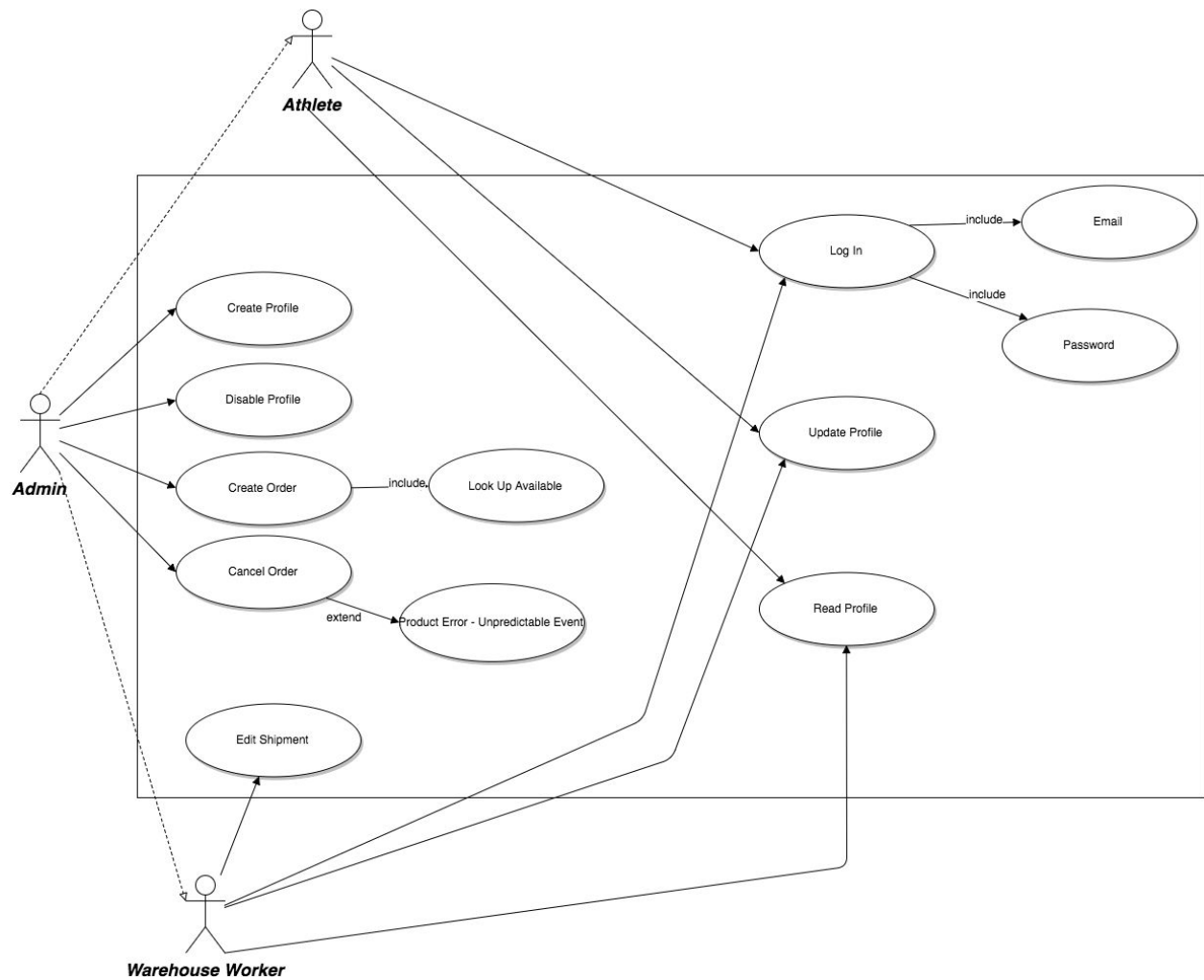
Use Case Documents

Use Case ID	UC-01
Use Case Name	Log In
Description	Admins, athletes, and warehouse workers can log in to the system to access any information available to them
Actors	Admin, athlete, warehouse worker
Pre-Conditions	The actor is not already logged in and the profile already exists and is active.
Post-Conditions	If successful, the actor is now logged in.

Frequency of Use	Multiple times daily - every time the tracker is used

Flow of Events		**Actor Action**	**System Response**
	1.	System prompts user to enter username & password	
	2.	Enter username & password	
	3.	Click submit	Validate username & password with information in database, begins user session

Variations	2. If username and/or password are invalid, system displays an error message. Actor can choose to return to beginning of flow or cancel login.
Exceptions	None
Developer Notes	Be sure passwords are salted and cryptographically hashed for security.

Use Case ID	UC-02
Use Case Name	Create shipment ticket
Description	Admin can create a shipment ticket and send it to warehouse worker
Actors	Admins
Pre-Conditions	Athlete to receive products exists
Post-Conditions	Order ticket for specific product created and sent to warehouse worker
Frequency of Use	Whenever an athlete needs to be sent new products - multiple times per week when considering a large number of athletes

Flow of Events		**Actor Action**	**System Response**
	1.	Log into system	
	2.	Navigate to "create orders/tickets" page	Display all products

	3.	Select all products that will be attached to the newly created ticket, select "Create Shipment"	Popup modal shows summary of order ticket
	4.	Admin confirms they wish to create ticket	Adds order to shipment table. Alerts admin ticket has been sent to warehouse

Variations	None
Exceptions	None
Developer Notes	None

Use Case ID	UC-03		
Use Case Name	Cancel shipment		
Description	Admin can cancel a shipment ticket after is has been created		
Actors	Admins		
Pre-Conditions	A shipment ticket has been created and not yet fulfilled		
Post-Conditions	Shipment marked as cancelled in database		
Frequency of Use	Whenever a shipment is cancelled by admin		
Flow of Events		Actor Action	System Response
	1.	Log into system	
	2.	Navigate to "shipments" page	Display page that lists all shipments, specifying which have not yet been fulfilled
	3.	Navigate to needed shipment, click edit button	Popup window with edit options opens
	4.	Change status to cancelled	Updates shipment status field to cancelled within database. Alerts admin shipment has been cancelled.
Variations	None		

Exceptions	None
Developer Notes	None

Use Case ID	UC-04
Use Case Name	Edit own profile
Description	Actor can edit fields associated with their profile
Actors	Admin, Athlete, Warehouse Worker
Pre-Conditions	Actor must have account, and must be logged in to that account
Post-Conditions	Actors information they wish to edit will be updated
Frequency of Use	Whenever the actor needs to make a change to their profile

Flow of Events		**Actor Action**	**System Response**
	1.	Login to system	Logs in, shows the actor's profile
	2.	Click edit button	Opens pop-up edit window
	3.	Edit needed fields	
	4.	Click "save changes" button	Updates user profile info in database, closes pop-up, displays updated information on profile page

Variations	None
Exceptions	None
Developer Notes	None

Use Case ID	UC-05
Use Case Name	View own profile
Description	Actor can view information stored on their profile
Actors	Admins, Athletes, Warehouse Workers

Pre-Conditions	Actor must have account, and must be logged in to that account
Post-Conditions	Actor has viewed account information
Frequency of Use	Whenever an actor wishes to review or verify information on their profile - daily.

Flow of Events		Actor Action	System Response
	1.	Log in to system	Logs in
	2.	Click on "View Profile"	Displays a list of the user's information, including their name, address, and shipments that they have sent or received

Variations	None
Exceptions	None
Developer Notes	None

Use Case ID	UC-06
Use Case Name	Edit Shipment
Description	Warehouse worker or admin edits a shipment, either to alter the information or to mark it as shipped.
Actors	Warehouse worker, Admin
Pre-Conditions	Shipment ticket has been created and shipment has not yet been fulfilled.
Post-Conditions	Shipment ticket altered.
Frequency of Use	Daily - at least every time a shipment is sent

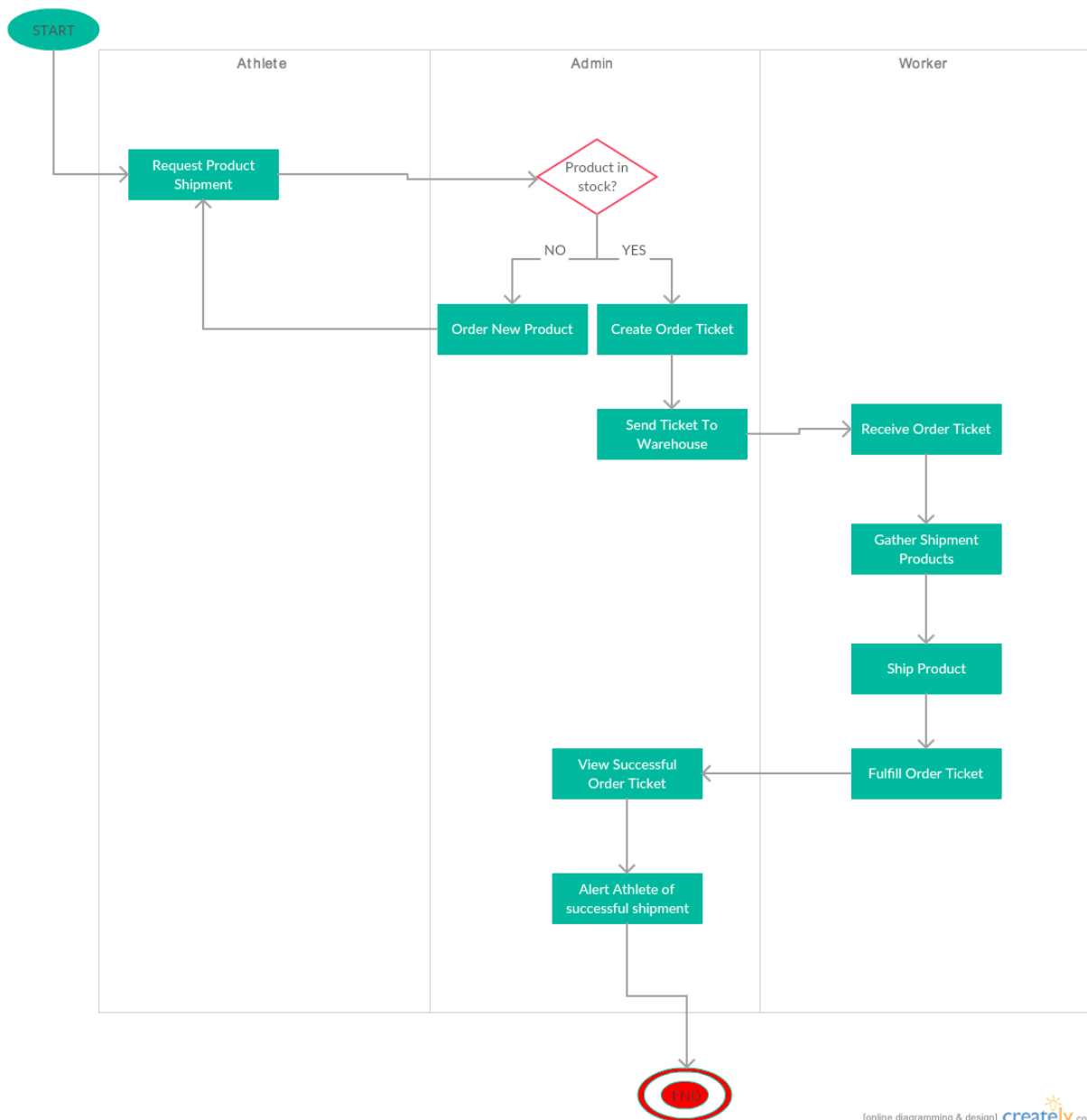| Flow of Events		Actor Action	System Response
	1.	Navigate to "Shipments" page	Display shipments
	2.	Click edit button for corresponding shipment	Opens pop-up window with editable fields
	3.	Update necessary fields	None
	4.	Click "save changes"	Update field(s) in

			database
Variations	3. If marking as shipped, worker first prepares and ships physical order		
Exceptions	None		
Developer Notes	None		

Use Case ID	UC-07		
Use Case Name	Create Profile		
Description	Admin can create a user (profile) for user types Admin, Athlete, and Warehouse Worker		
Actors	Admins		
Pre-Conditions	The profile being created doesn't already exist.		
Post-Conditions	User and profile are created, information stored in DB, and admin is alerted of success (or failure, with an error message)		
Frequency of Use	Whenever new users need to be added to the system (new athletes brought on, new warehouse workers hired, new admins appointed/hired)		
Flow of Events		**Actor Action**	**System Response**
	1.	Log into system	
	2.	Navigate to "athletes", "warehouse workers", or "admins" user page	Display page that lists all users of the corresponding type
	3.	Click "Create User" button, where User is the type of user to be created (i.e., athletes page has a "Create Athlete" button, etc)	
Variations	None		
Exceptions	None		
Developer Notes	None		

Use Case ID	UC-08		
Use Case Name	Disable Profile		
Description	Disable login capabilities for terminated users		
Actors	Admin		
Pre-Conditions	User profile exists and is currently active.		
Post-Conditions	Profile is marked as inactive, user can no longer log in.		
Frequency of Use	Rare - when an employee leaves the company or an athlete loses sponsorship		
Flow of Events		**Actor Action**	**System Response**
	1.	Log in	
	2.	Navigate to page for correct type of user (athlete, worker, or admin)	Display user page
	3.	Find needed user, click edit button	Open pop-up window with user editable fields
	4.	Update "status" field to "inactive"	
	5.	Click "save changes" button	Updates status field within database to inactive. Updates username and password to NULL values.
Variations	None		
Exceptions	None		
Developer Notes	None		

Activity Diagrams
Matthew Uhlar - Ship Product For Athlete

Lucy Wilkinson - Edit Shipment (UC-06 / UR-10)

Admin	Warehouse Worker	Athlete

Start → Create Shipment → Notify Worker → Log In to system → Successful?

- No → (back to Log In to system)
- Yes → Navigate to Shipments page → Shipping Now?
  - No → Click Edit button for shipment → Update necessary fields → Save changes → Shipped?
  - Yes → Prepare and ship physical product(s)

Shipped?
- No → (back to Shipping Now?)
- Yes → Receive product(s) → **End**
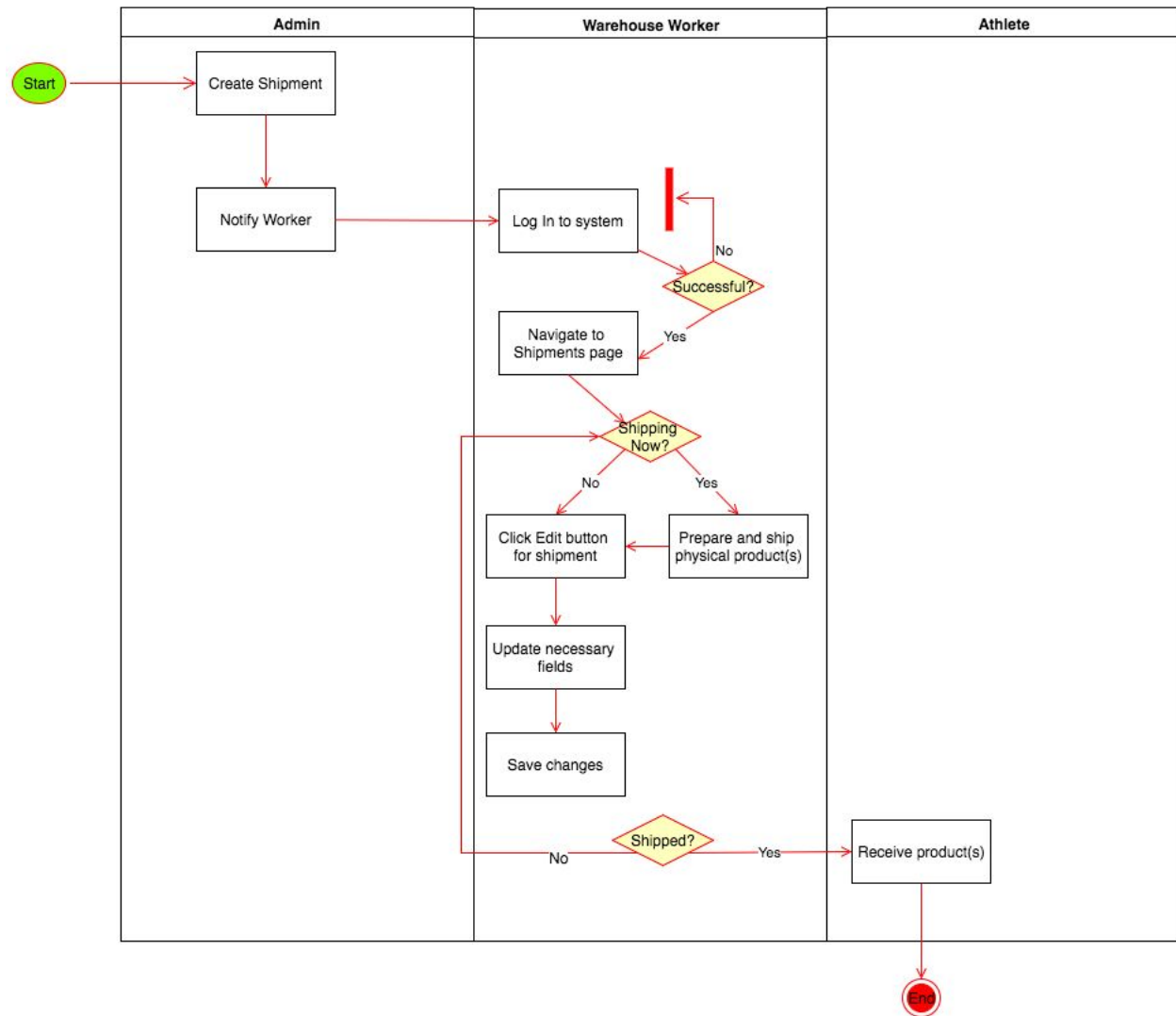
Dmytro Ryzhkov - Edit Own Profile (UC-04)
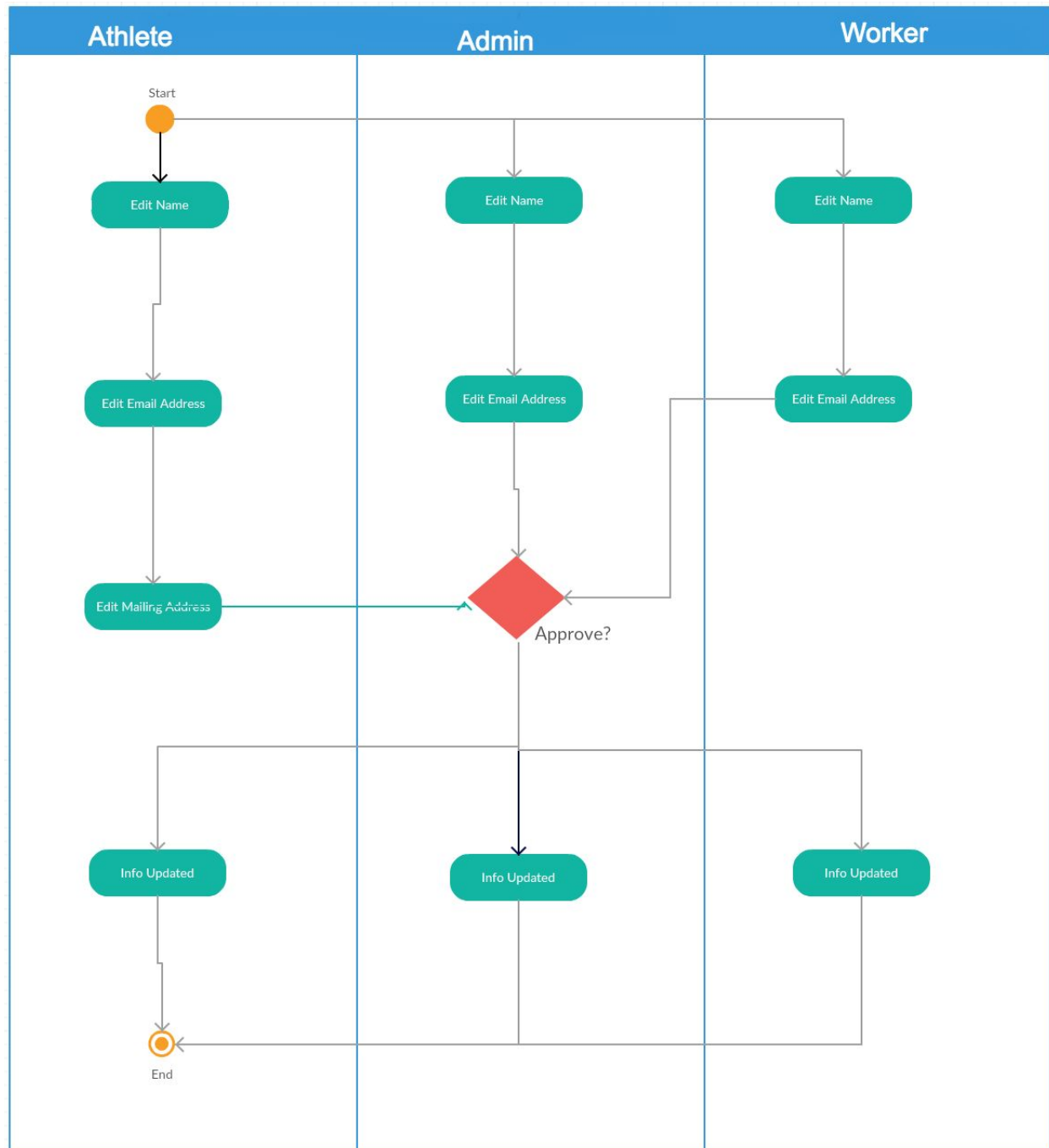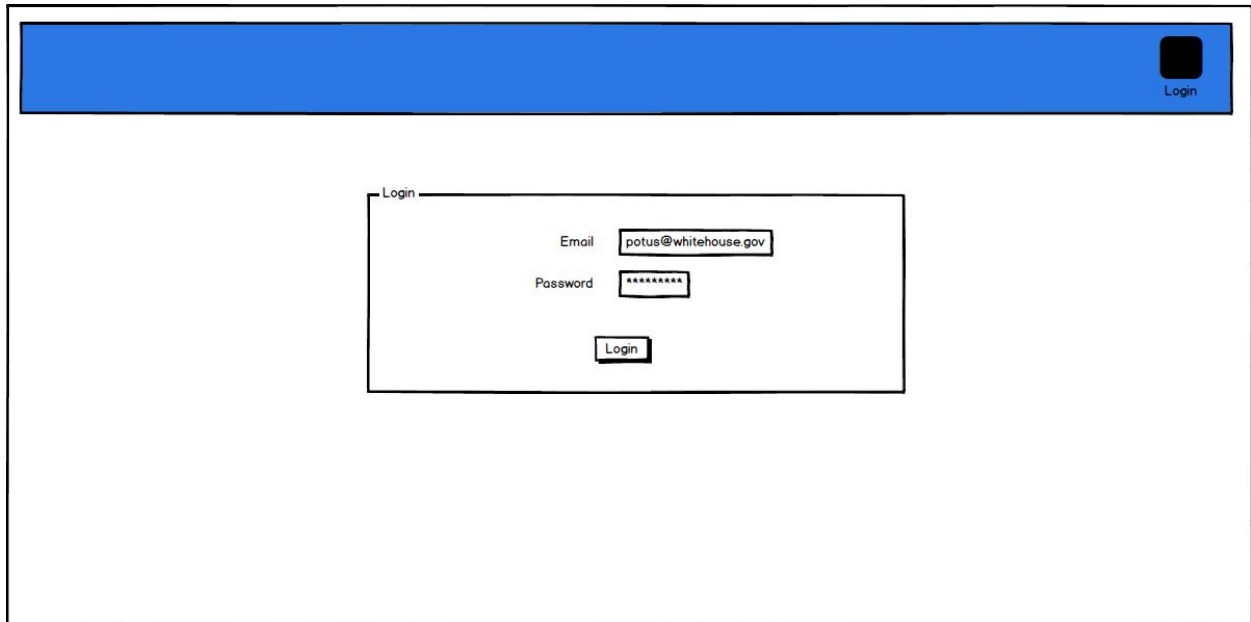
Data Storage

We are planning to use a relational database (mySQL) to store our data. We will have a user table with basic information and individual Admin, Athlete, and Warehouse Worker tables with fields specific to those types of users. We will also have a table of products offered, and a table of pending/completed/cancelled shipments.
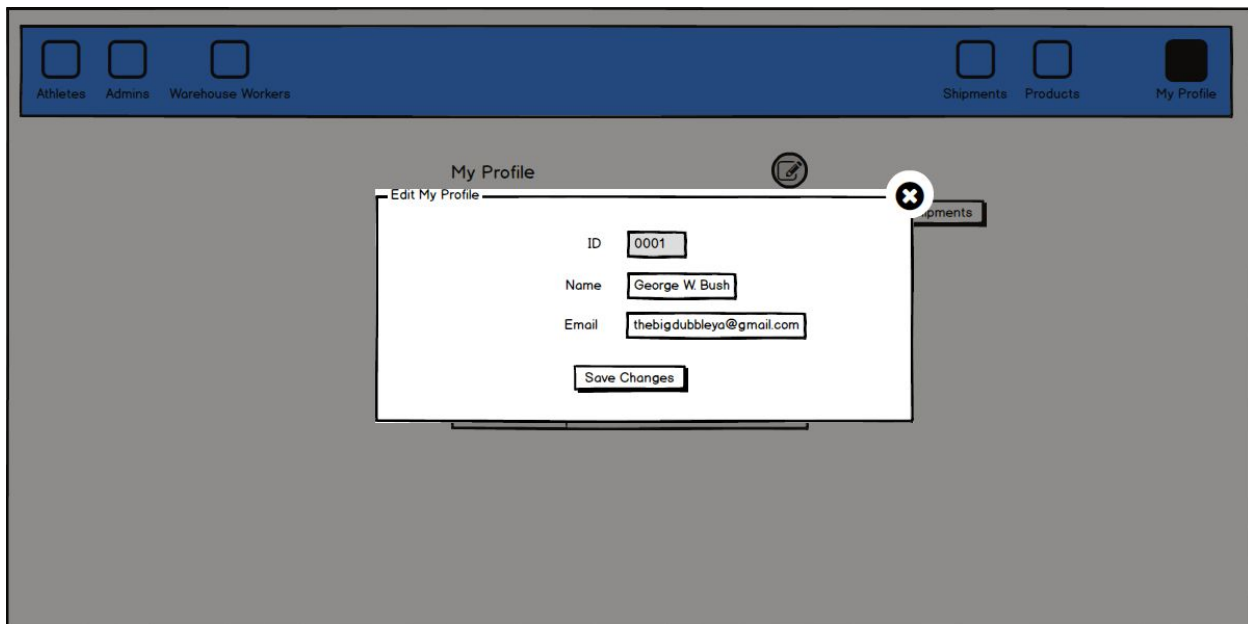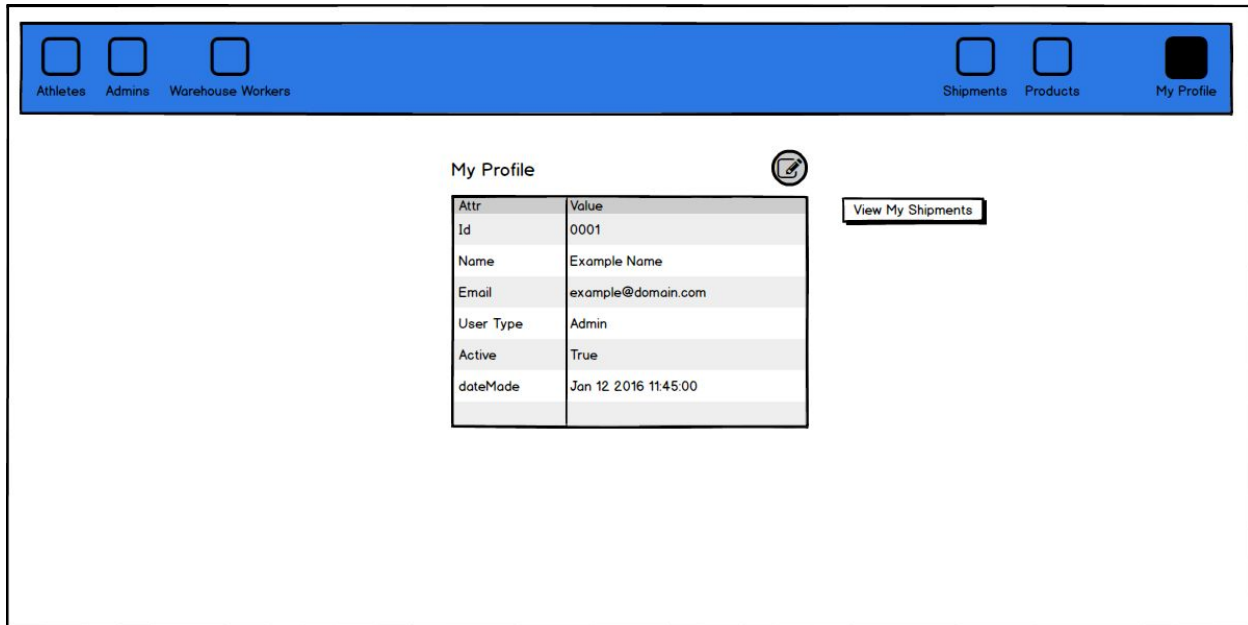
UI Mockups

Login Page
- ● Accessed as first step for any user

User Profile Page
- ● Shows information for logged-in user, contains link to edit own info
- ● Admins
  - ○ Can view their information
  - ○ Can edit their information
- ● Athletes
  - ○ Can view their information
  - ○ Can edit their information
- ● Warehouse Workers
  - ○ Can view their information
  - ○ Can edit their information

Athletes Page
- Contains list of all athletes sponsored by the company
- Ability to filter by date and/or status
- Admins
    - Ability to view all athletes
    - Ability to create new athlete
    - Ability to edit all athletes
- Athletes
    - Ability to view only themselves
    - Ability to edit only themselves
- Warehouse Worker

- Ability to view all athletes
- Ability to create new athlete
- Ability to edit all athletes

Athletes

New Athlete

Filter By Status
☑ Active
☑ Inactive

Filter By Date
After
8/10/2015

Before
10/12/2016

Id	Name	Email	Mailing Address	Date Joined	Total Value Sent	Status
0001	Shaun White	tightpants@gmail.com	1203 19th Street Carlsbad CA 48576	1/20/14	$1342.64	active
0002	Jack Black	schoolofrock@notaconspiracy.gov	1631 Blake St Denver CO 80312	8/23/99	$748.62	active
0003	Bob Costas	pinkeye@theolympics.com	12 Imperial Way NBCLand NY 81113	3/10/62	$19.23	inactive

Edit Athlete

ID   0001

Name   Shaun White

Email   tightpants@gmail.com

Date Joined 01/20/14

Status   Active

Save Changes

Admin List Page
- List all admins and their attributes
- Can be sorted by any attribute
- Can be filtered by status and/or date joined
- Admins
  - Can view all admins
  - Can edit all admins
  - Can create new admins
- Athletes
  - Cannot access
- Warehouse Workers
  - Cannot access

Admins

New Admin

Filter By Status
- ☑ Active
- ☑ Inactive

Filter By Date

After
8/10/2015

Before
10/12/2016

Id	Name	Email	Date Joined	Status
0001	George W. Bush	thebigdubbleya@hotmail.com	1/20/14	active
0002	Curious George	cantread@notaconspiracy.gov	8/23/99	inactive
0003	Darth Vador	hhhhhhhh@fathersanonymous.org	3/10/62	active

Edit Admin ⊗

ID   0001

Name   George W. Bush

Email   thebigdubbleya@hotmail.com

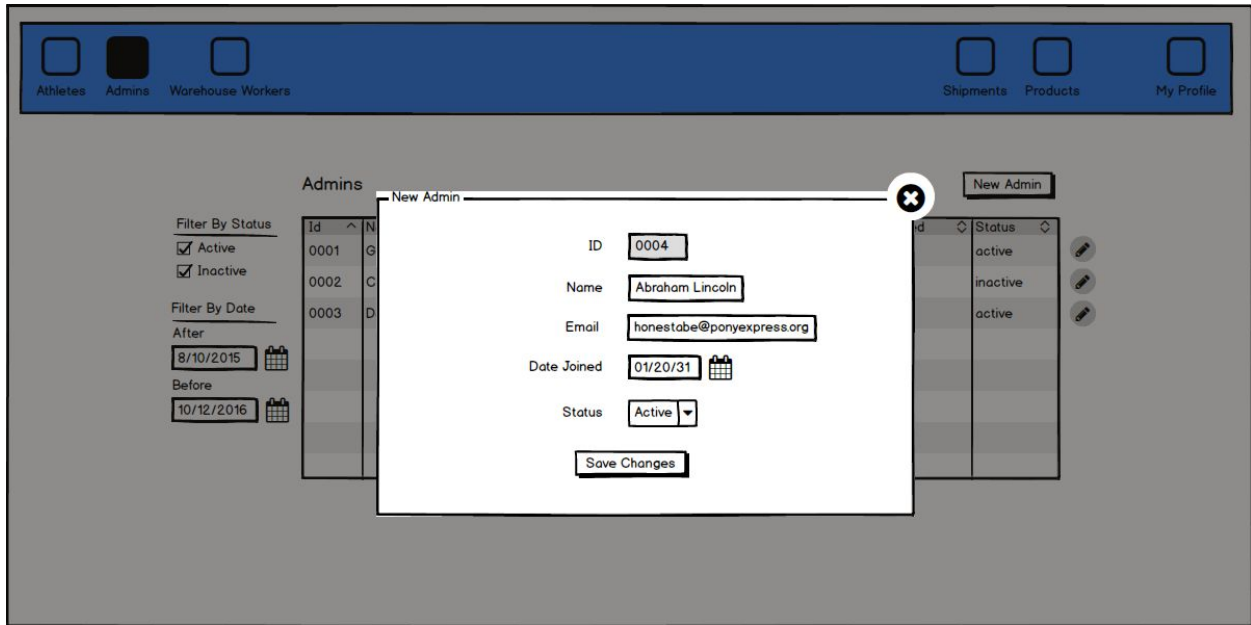Date Joined 01/20/14

Status   Active ▼

Save Changes

Warehouse Worker List Page
- List all warehouse workers and their attributes
- Can be sorted by any attribute
- Can be filtered by status and/or date joined
- Admins
  - Can view all warehouse workers
  - Can edit all warehouse workers
  - Can create new warehouse workers
- Athletes
  - Cannot access
- Warehouse Workers
  - Cannot access

Screen 1

Navigation bar: Athletes | Admins | Warehouse Workers | Shipments | Products | My Profile

Warehouse Workers

[New Warehouse Worker]

Filter By Status
- ☑ Active
- ☑ Inactive

Filter By Date

After
8/10/1990

Before
10/12/2016

Id ^	Name ◇	Email ◇	Date Joined ◇	Status ◇
0001	Darrel Philbin	icecold@hotmail.com	1/20/14	active
0002	Curious George	cantread@notaconspiracy.gov	8/23/99	inactive
0003	Jim Halpert	jim@halp-dawg.net	3/10/92	active

Screen 2

Navigation bar: Athletes | Admins | Warehouse Workers | Shipments | Products | My Profile

Warehouse Workers

Filter By Status
- ☑ Active
- ☑ Inactive

Filter By Date

After
8/10/1990

Before
10/12/2016

Id ^	N
0001	D
0002	C
0003	J

Edit Warehouse Worker ⊗

ID	0001
Name	Darrel Phillbin
Email	icecold@gmail.com
Date Joined	01/20/14
Status	Active ▼

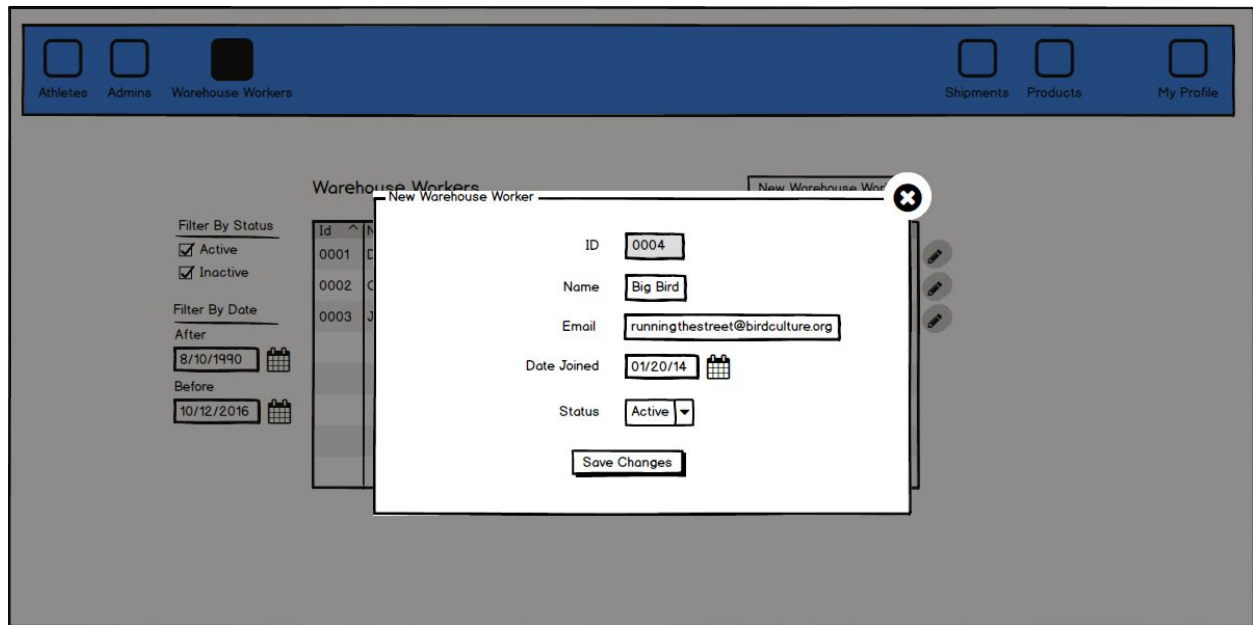[Save Changes]

Shipments Page
- Lists all shipments and their attributes
- Can be sorted by any attribute
- Can be filtered by athlete and/or date sent
- Admins
  - Can view all shipments
  - Can edit all shipments
  - Can create new shipments
- Athletes
  - Can view their own shipments
- Warehouse Workers
  - Can view all shipments
  - Can edit all shipments (only to update status & date sent)

Shipments

New Shipment

Filter By Athlete
- ☑ Shaun White
- ☑ Jack Black
- ☑ Bob Costas

Filter By Date

After

8/10/2015

Before

10/12/2016

Id ^	Recipient ◇	Sender ◇	Products ◇	Total Value ◇	Date Sent ◇	Status ◇	
0001	Shaun White	Darrel Philbin	(Bike Helmet; Bike)	$1523.99	1/20/16	sent	✎
0002	Jack Black	Darrel Philbin	(Bike Shorts; Bike Shorts; Bike Shorts)	$95.97	1/22/16	canceled	✎
0003	Bob Costas	Jim Halpert	(Bike Helmet; Bike Helmet; Bike Shorts	$81.97	3/21/16	pending	✎

Filter By Athlete
- ☑ Shaun White
- ☑ Jack Black
- ☑ Bob Costas

Filter By Date

After

8/10/2015

Before

10/12/2016

New Shipment

Edit Shipment ⊗

ID   0001

Recipient   Shaun White ▾

Products
- Bike Helmet   1 ⇅
- Bike Shorts   2 ⇅
- Bike   1 ⇅

Status   Sent ▾

Sender   Darrel Phillbin ▾

Save Changes

◇	Date Sent ◇	Status ◇	
	1/20/16	sent	✎
	1/22/16	canceled	✎
	3/21/16	pending	✎

Products Page
- Lists all products and their attributes
- Admins
    - Can view all products
    - Can edit all products
    - Can create new products
- Athletes
    - Cannot access
- Warehouse Workers
    - Cannot access

User Interactions
Matthew Uhlar - Create Shipment

Admin

createTicket (productName)

Controller: AdminController

<<Create>>

Controller: Product Controller

getProductInfo(productName)

<<Create>>

Model: Product Model

getProduct(name)

product

product

<<Create>>

Controller: Worker Controller

addShipment(product)

<<Create>>

Model: Shipment Model

enqueueShipment(product)
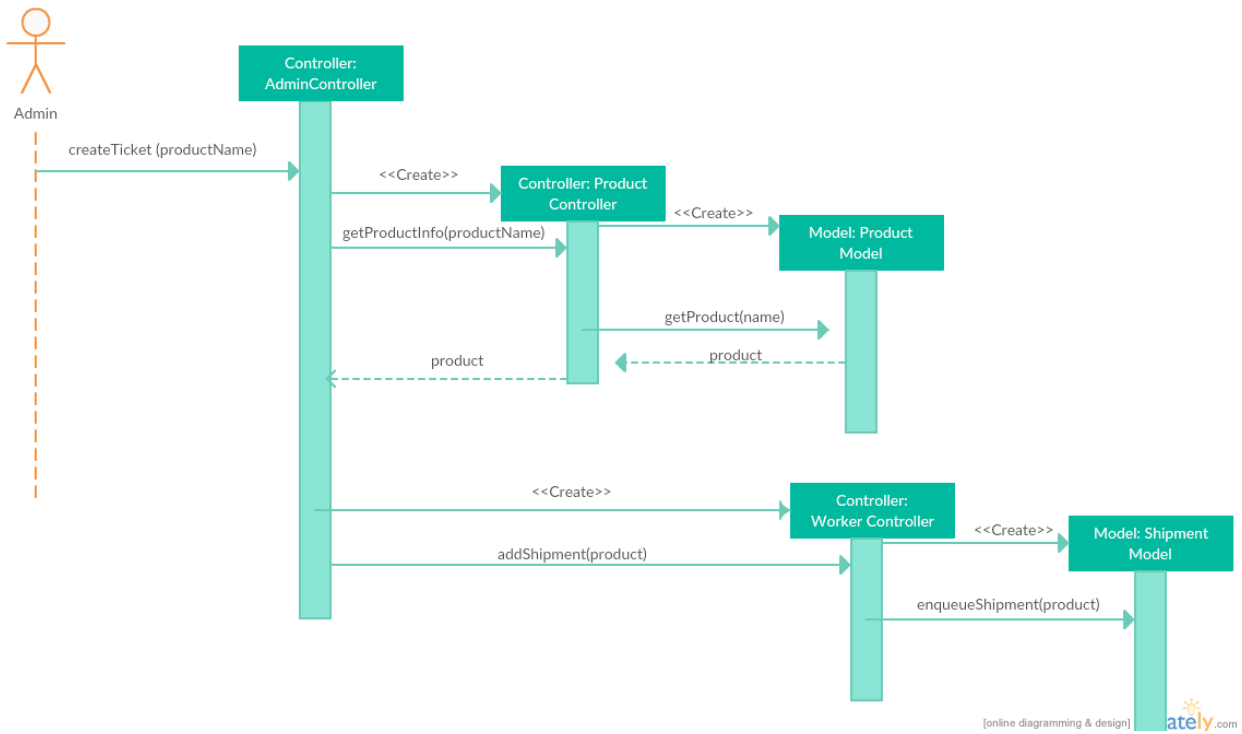
Dmytro Ryzhkov - UR-06 - UC-04
User is able to edit their existing profile information
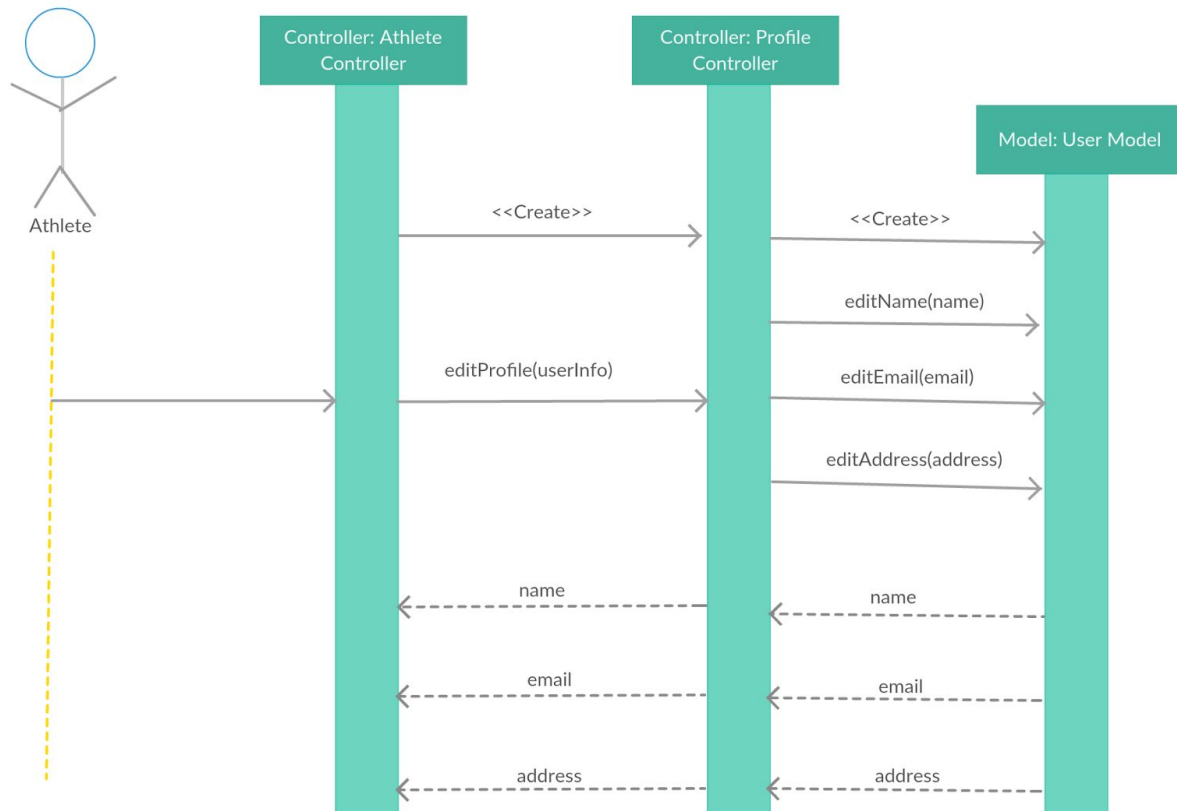
Lucy Wilkinson - Edit Shipment (UC-06 / UR-10)
Warehouse Worker can update shipment status.

Class Diagram

Model *(italic)*
- dbToken: String

- dbConnect()

Controller *(italic)*
- model : Model
- view : View

- getModel ( ) : Model
- getView ( ) : Model

<<Enumeration>>
UserType
- ADMIN
- ATHLETE
- WORKER

Login Model

+ validateUser (username: String, password: String) : Int
+ getUserType(uuid: Int) : UserType

Login View

+ render()
+ update()

Sessions Controller

+ SessionsController( )
+ validateLogin(username: String, password: String) : UserType
+ instantiateProfileController(userType: Int)

Admin Profile View

+ render()
+ update()

User Model

+ getUserInfo(uuid: Int): Array
+ editProfile(userInfo: Array)
+ deleteProfile(uuid: Int)

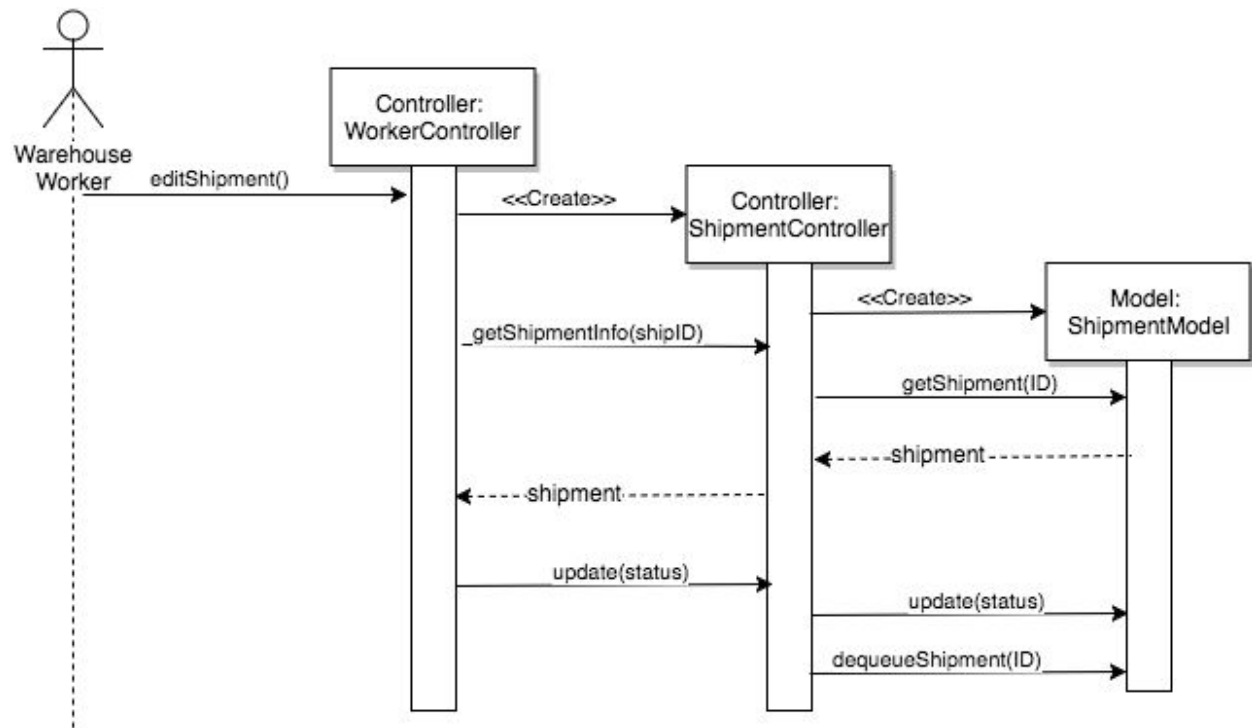**Profile Controller**
- userType: UserType
- uuid: Int

+ ProfileController(userType: UserType, uuid: Int)
+ viewShipments( )
+ viewProducts( )
+ sortProducts(field: String)

Athlete Profile View

+ render()
+ update()

Worker Profile View

+ render()
+ update()

Product Model

+ getProducts( ) : Array
+ sortProducts (field: String): Array
+ addProduct (product: String): Bool
+ deleteProduct(product: String): Bool

Products Controller

+ ProductController( )
+ instantiateProfileController( )
+ viewProducts( ): Array
+ sortProducts(field: String): Array

Admin Products View

+ render()
+ update()

Shipments Model

+ getShipments( ): Array
+ sortShipments(field: String): Array
+ cancelShipment(shipmentID: Int): Bool
+ createShipment(Array) : Bool

Athlete Shipments View

+ render()
+ update()

Shipments Controller

+ ShipmentController( )
+ instantiateProfileController( )
+ viewShipments( ): Array
+ sortShipments(field: String): Array

Worker Shipments View

+ render()
+ update()

Admin Shipments View

+ render()
+ update()