*Florida International University*

*School of Computing and Information Sciences*

Final Deliverable

TODO LIST OPTIMIZER 1.0

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***Abstract***

*Todo…*

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### Introduction

Todo-list Optimizer attempts to be a solution for the busy day schedule. It is meant to be a mobile application to make it accessible at any time to the user. The main focus of the Todo-list Optimizer is to combine the best of routing and task management algorithms in an easy-to-use and improved user interface (UI) that enhances the user experience (UX). Todo-list optimizer provides a seamless integration between navigation and task management, improving efficiency using intelligent routing.

### Current System

The current system consists of applications such as Google Maps, Waze, Apple Reminders, Todoist, among others. These systems work well as independent modules but it does not exist an application that combines those features (task management and efficient routing). Some applications(e.g. MapQuest, Apple Remainders) have attempted to combine these obtaining non-intuitive user interfaces or excessive steps to accomplish a goal. Overall, there are no application in the market that combines the task management with routing algorithm in an efficient and pleasant way or within the same application.

### Purpose of New System

Todo-List optimizer !{Current.System}

Todo-List optimizer attempts to improve the daily schedule by providing a better integration between task management and routing algorithms. The application enables the user to create tasks (e.g. milk, vegetables, toothpaste, etc.) associated with places (e.g. Walgreens, Home Depot, Walmart, Home) to find the optimal route to accomplish them. It serves not only as a navigation system, but also, once the user is in the desired place, he or she can follow up with the task related to it. The application allows the user to save his or her favorite places so the next time it will be easy to access and them. Another feature is that the application learns user patterns (e.g. time that the user spends in an specific place or type of places) allowing it to predict more accurately the length of the solving all the tasks.

## User Stories

The following section provides the detailed user stories that were implemented in this iteration of the Todo-List Optimizer project. These user stories served as the basis for the implementation of the project’s features. This section also shows the user stories that are to be considered for future development.

### Implemented User Stories

**User Story Name: Setup Sign Up System(Frontend + Backend)**

**User Story Name: Setup Login System(Frontend + Backend)**

**User Story Name: Setup Reset Password (Frontend + Backend)**

**User Story Name: Add Places**

**User Story Name: Add tasks to places**

**User Story Name: Show Itinerary and Total Time**

**User Story Name: View Map Overview**

**User Story Name: Setup Navigation (Frontend + Backend)**

**User Story Name: View Places on the Map**

**User Story Name: Add New Place on the Map View**

**User Story Name: Update Route on Map View if Delays**

**User Story Name: Add Favorite Places**

**User Story Name: Add History of Time Spent in Places**

## Project Plan

This section describes the planning that went into the realization of this project. This project incorporated the agile development techniques and as such required the sprints to be planned. These sprint plannings are detailed in the section. This section also describes the components, both software and hardware, chosen for this project.

In order to plan out a successful execution of Breazehome, an agile and effective methodology  
was used to keep all developers, project managers, and product owners on track. Various  
brainstorming sessions took place detailing issues ranging from user interface tweaks to the  
existing Breazehome design to whether features should be prioritized sooner rather than later.  
The team also aimed to have the design of each feature completed by our designer, Ben, before  
the frontend team began working on them to minimize the cost of development.

Iterations on the product were divided into sprints. Each sprint lasted 2 weeks, with a sprint  
checkpoint meeting halfway. Their goal was to plan out what each developer had to work on for  
the next two weeks. Once a feature was built out, demos took place in weekly sprint meetings.  
Each team member would present their work from the past week and discuss with the rest of the  
team. This served as a method for all team members to be aware of what their colleagues were  
working on. Additionally, each day the team had scrum meetings which outlined what each  
member was working on, what they accomplished since the day before, and what hurdles they  
were currently facing.

### Hardware and Software Resources

The following is a list of all hardware and software resources that were used in this project:

1. Hardware
   1. Local Server (MacBook Pro)
      1. 16 GB RAM
      2. 256 GB SSD Disk
      3. 1000 GB Transfer
2. Software
   1. Express
   2. React Native

### Sprint Plan

#### Sprint 3

**Sprint Planning Meeting**

Release #:

Sprint #: 3

Date:

Attendees:

Start Time:

End Time:

After discussion, the velocity of the team were estimated to be 391 (0.8 \* 489) hours

* + - 1. Manuel Garcia:
      2. Daniel Gonzales:
      3. Salvador Ricardo: 1 hours

The goal for the next Sprint is:

* + - 1. Asd
      2. Ase
      3. Asd

The product owner chose the following user stories to be done during the next sprint. They are ordered based on their numbers.

1. Manuel Garcia
   * #123 Refaf
   * #213 sad
2. Daniel Gonzales
   * #12323 sadsd
3. Salvador Ricardo
   * #123 asdsfafa

#### Sprint 4

**Sprint Planning Meeting**

Release #:

Sprint #: 3

Date:

Attendees:

Start Time:

End Time:

After discussion, the velocity of the team were estimated to be 391 (0.8 \* 489) hours

* + - 1. Manuel Garcia:
      2. Daniel Gonzales:
      3. Salvador Ricardo: 1 hours

The goal for the next Sprint is:

* + - 1. Asd
      2. Ase
      3. Asd

The product owner chose the following user stories to be done during the next sprint. They are ordered based on their numbers.

1. Manuel Garcia
   * #123 Refaf
   * #213 sad
2. Daniel Gonzales
   * #12323 sadsd
3. Salvador Ricardo
   * #123 asdsfafa

#### Sprint 4

**Sprint Planning Meeting**

Release #:

Sprint #: 3

Date:

Attendees:

Start Time:

End Time:

After discussion, the velocity of the team were estimated to be 391 (0.8 \* 489) hours

* + - 1. Manuel Garcia:
      2. Daniel Gonzales:
      3. Salvador Ricardo: 1 hours

The goal for the next Sprint is:

* + - 1. Asd
      2. Ase
      3. Asd

The product owner chose the following user stories to be done during the next sprint. They are ordered based on their numbers.

1. Manuel Garcia
   * #123 Refaf
   * #213 sad
2. Daniel Gonzales
   * #12323 sadsd
3. Salvador Ricardo
   * #123 asdsfafa

#### Sprint 5

**Sprint Planning Meeting**

Release #:

Sprint #: 3

Date:

Attendees:

Start Time:

End Time:

After discussion, the velocity of the team were estimated to be 391 (0.8 \* 489) hours

* + - 1. Manuel Garcia:
      2. Daniel Gonzales:
      3. Salvador Ricardo: 1 hours

The goal for the next Sprint is:

* + - 1. Asd
      2. Ase
      3. Asd

The product owner chose the following user stories to be done during the next sprint. They are ordered based on their numbers.

1. Manuel Garcia
   * #123 Refaf
   * #213 sad
2. Daniel Gonzales
   * #12323 sadsd
3. Salvador Ricardo
   * #123 asdsfafa

#### Sprint 6

**Sprint Planning Meeting**

Release #:

Sprint #: 3

Date:

Attendees:

Start Time:

End Time:

After discussion, the velocity of the team were estimated to be 391 (0.8 \* 489) hours

* + - 1. Manuel Garcia:
      2. Daniel Gonzales:
      3. Salvador Ricardo: 1 hours

The goal for the next Sprint is:

* + - 1. Asd
      2. Ase
      3. Asd

The product owner chose the following user stories to be done during the next sprint. They are ordered based on their numbers.

1. Manuel Garcia
   * #123 Refaf
   * #213 sad
2. Daniel Gonzales
   * #12323 sadsd
3. Salvador Ricardo
   * #123 asdsfafa

#### Sprint 7

**Sprint Planning Meeting**

Release #:

Sprint #: 3

Date:

Attendees:

Start Time:

End Time:

After discussion, the velocity of the team were estimated to be 391 (0.8 \* 489) hours

* + - 1. Manuel Garcia:
      2. Daniel Gonzales:
      3. Salvador Ricardo: 1 hours

The goal for the next Sprint is:

* + - 1. Asd
      2. Ase
      3. Asd

The product owner chose the following user stories to be done during the next sprint. They are ordered based on their numbers.

1. Manuel Garcia
   * #123 Refaf
   * #213 sad
2. Daniel Gonzales
   * #12323 sadsd
3. Salvador Ricardo
   * #123 asdsfafa

## System Design

This section contains information on the design decisions that went into this project. The architecture patterns are outlined and explained. The entire system is shown in a package diagram and the subsystems are explained. Finally, the design patterns used in the project are discussed.

### Architectural Patterns

### System and Subsystem Decomposition

### Deployment Diagram

### Design Pattern

## System Validation

Unit Tests:

* + Test case ID: signup
  + Description/Summary of Test: sasdas
  + Pre-condition: N/A
  + Expected Result:
  + Actual Result:
  + Status (Fail/Pass): Pass

## Glossary

1. MVC: Model, View, Controller architecture design paradigm.

## Appendix

### Appendix A – UML Diagrams

### Appendix B – User Interface Design

### Appendix C – Sprint Review Reports

#### Sprint 3

After a show and tell presentation, the implementation of the following user stories were accepted by the product owners:

* Manuel Garcia
  + #1234 Tasd
* Daniel Gonzales
  + #768 asd
* Salvador Ricardo
  + #18723

#### Sprint 4

After a show and tell presentation, the implementation of the following user stories were accepted by the product owners:

* Manuel Garcia
  + #1234 Tasd
* Daniel Gonzales
  + #768 asd
* Salvador Ricardo
  + #18723

#### Sprint 5

After a show and tell presentation, the implementation of the following user stories were accepted by the product owners:

* Manuel Garcia
  + #1234 Tasd
* Daniel Gonzales
  + #768 asd
* Salvador Ricardo
  + #18723

#### Sprint 6

After a show and tell presentation, the implementation of the following user stories were accepted by the product owners:

* Manuel Garcia
  + #1234 Tasd
* Daniel Gonzales
  + #768 asd
* Salvador Ricardo
  + #18723

#### Sprint 7

After a show and tell presentation, the implementation of the following user stories were accepted by the product owners:

* Manuel Garcia
  + #1234 Tasd
* Daniel Gonzales
  + #768 asd
* Salvador Ricardo
  + #18723

### Appendix D – Sprint Retrospective Reports

#### Sprint 3

What went wrong? (what went wrong this sprint?)

* Manuel Garcia
  + Sadasd
* Daniel Gonzales
  + Axdsad
* Salvador Ricardo
  + asdasd

Did we do a good job estimating our team’s velocity?

* Yes

Did we do a good job estimating the points (time required) for each user story?

* No

Did each team member work as scheduled?

* Yes

What went right? (what went right this sprint? Learn something useful?)

* Manuel Garcia
  + Sadsad
* Daniel Gonzales
  + Asdasd
* Salvador la loca
  + Asdasd

How to address the issues in the next sprint? (feedback on how to improve the process and product, 1 thing per person)

* How to improve the process?
  + Manuel Garcia
    - SAdasdas
  + Daniel Gonzales
    - Asdad
  + Salvador Ricardo
    - Asdasd
* How to improve the product?
  + Manuel Garcia
    - SAdasdas
  + Daniel Gonzales
    - Asdad
  + Salvador Ricardo
    - Asdasd

#### Sprint 4

What went wrong? (what went wrong this sprint?)

* Manuel Garcia
  + Sadasd
* Daniel Gonzales
  + Axdsad
* Salvador Ricardo
  + asdasd

Did we do a good job estimating our team’s velocity?

* Yes

Did we do a good job estimating the points (time required) for each user story?

* No

Did each team member work as scheduled?

* Yes

What went right? (what went right this sprint? Learn something useful?)

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* Salvador la loca
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    - Asdad
  + Salvador Ricardo
    - Asdasd
* How to improve the product?
  + Manuel Garcia
    - SAdasdas
  + Daniel Gonzales
    - Asdad
  + Salvador Ricardo
    - Asdasd

#### Sprint 5

What went wrong? (what went wrong this sprint?)

* Manuel Garcia
  + Sadasd
* Daniel Gonzales
  + Axdsad
* Salvador Ricardo
  + asdasd

Did we do a good job estimating our team’s velocity?

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    - SAdasdas
  + Daniel Gonzales
    - Asdad
  + Salvador Ricardo
    - Asdasd

#### Sprint 6

What went wrong? (what went wrong this sprint?)

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  + Axdsad
* Salvador Ricardo
  + asdasd

Did we do a good job estimating our team’s velocity?

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* Daniel Gonzales
  + Asdasd
* Salvador la loca
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  + Daniel Gonzales
    - Asdad
  + Salvador Ricardo
    - Asdasd
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    - SAdasdas
  + Daniel Gonzales
    - Asdad
  + Salvador Ricardo
    - Asdasd

#### Sprint 7

What went wrong? (what went wrong this sprint?)

* Manuel Garcia
  + Sadasd
* Daniel Gonzales
  + Axdsad
* Salvador Ricardo
  + asdasd

Did we do a good job estimating our team’s velocity?

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Did we do a good job estimating the points (time required) for each user story?

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Did each team member work as scheduled?

* Yes

What went right? (what went right this sprint? Learn something useful?)

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    - SAdasdas
  + Daniel Gonzales
    - Asdad
  + Salvador Ricardo
    - Asdasd

### Appendix F - User Manuals, Installation/Maintenance Document, Shortcomings/Wishlist Document and other documents

#### Videos

* Intro Video

#### Posters

* sdfsdfdsf