**Burn It**

Research Paper & Final Project Proposal

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CSC 391/491 - Mobile Application Development (iOS) 2

DePaul University - Spring 2021

**Research title:**

Burn It

**Problem Statement:**

How people can use their phones to track their calories and how many calories they burn.

**Research by:**

Jessica Bender

**Abstract:** (Word Count: 224)

I am going to begin by looking at what apps are already out there for both nutrition and exercise. I so far have fitness Fitbit, Strava, Peloton, Runkeeper, and MyFitnessPal. Then for Nutrition I want to look into Weight MyPlate Calorie Counter, and SuperFood – Healthy Recipes. I want to see how people can use their phones to make healthier decisions. I will look into each app separately to see how they incorporate both exercise and healthy diets. I will then take the best of both to help me develop my app. I would like to also see how the apple watch incorporates fitness and health. Next, I want to go into the benefits and disadvantages of using an app for health and fitness. In addition, I want to see alternatives from using your phone. If there were no apps how would people maintain a healthy lifestyle? Lastly, I want to research into if apps encourage more healthy lifestyles through social interactions. For example, on my Fitbit I have the option to add friends and compete in step competitions. Every time I compete, I find myself being more active than usual because I don't want to lose the challenge. Thus, I want to research what other apps have to offer for encouragement through social interactions and if it actually helps people to reach their goals.

**Project title:**

Burn It

**Project Description:**

* **What will your app do?**

Overall, I want my app to be allow users to put in the calories they ate and give back some suggested workout to burn them off. I hope to be able to use a Fitbit or other fitness tracker to help track exercise. If I can’t use Fitbit, I want to look into how your phone can track that. Then I want to be able to use the camera to scan barcodes to track calories. If time permits, I would also like to give the user healthy recipes to try and allow them to input those right into their calories.

* **What are the main features or functions?**

There will be two or three main features. The first one will be a calories counter. Second, will be a way to track exercise and give recommendations of exercises to help stay under calories. Lastly if time permits, I want to include a recipe section.

* **Discuss how your final project will apply or demonstrate the topics or techniques discussed in your research paper.**

My app and research go hand and hand. They both take fitness and health. I hope to be able to take the best parts of the apps I research to make my app.

**Preliminary Screen Design:** Describe each screen and include drawings of each screen. Hand-drawn diagrams are acceptable.

Text, letter

Description automatically generatedText, whiteboard

Description automatically generated

A picture containing text, envelope

Description automatically generatedText, letter

Description automatically generated

These 4 screens are a rough idea of what I am thinking the app will have

**API Features I’m Looking Into:**

* **US Department of Agriculture**

[https://fdc.nal.usda.gov/](https://fdc.nal.usda.gov/" \t "_blank)

* **Nutritionix**

<https://www.nutritionix.com/business/api?gclid=Cj0KCQjwyZmEBhCpARIsALIzmnK2yjkY6o6_EAXNNch_gEF2JJdPmBD7aTmYUrzguIb_ru-Jg4Zcd1QaAl-0EALw_wcB>

* **Edamam**

<https://developer.edamam.com/food-database-api-docs>

* **FitBit**

<https://dev.fitbit.com/build/reference/web-api/>

* **RunKeeper**

<https://rapidapi.com/blog/directory/runkeeper-health-graph/>