coffeenow Evaluation Plan

# Analytical Evaluation Plan

The purpose of this evaluation is to better understand the efficiency of our current interface for the CoffeeNow mobile application. We are hoping to comprehend if our interface allows a user of the CoffeeNow app to quickly and easily order a cup of Coffee from their favorite coffee shop.

To obtain a more complete picture of the how long a skilled user would take using our application to a place order for a cup of coffee we have decided to use GOMS/KLM. This analysis method will allow us to accurately measure the efficiency with which a skilled user orders a cup of coffee by measuring the time and effort that must be exerted by the user to achieve their goal.

From our interviews and observations we know that our demographics for users include both males and females, which own a smart phone, and drink coffee regularly. This application has the potential to reach a large audience base and as such a wide variety of individuals. In order to reduce the complexity of interface testing the main data we will be collecting is the time it takes a user to order a Dutch flavored coffee, with a shot of espresso, and with cream and sugar.

We hope to get as accurate a measurement on the average time it will take skilled user to place the order to better understand how much time we are actually saving them. This was one of the main problems we were hoping to solve as stated in our project proposal.

Furthermore, we will be analyzing how easy the overall process was. The main criterion for this measurement will be time and number of steps (i.e. button presses) needed to complete the task of ordering a cup of coffee.

The main tool we will be using to perform the analytical study is CogTool, we will be using the built in GOMS/KLM measurement tool to better understand the time and the total number of steps that will be involved. We have created a script in CogTool with all the necessary screens for the various steps our skilled user will be able to go through when ordering a cup of coffee through the wizard.

# Empirical Evaluation Plan

## Research Goal:

The goal of our usability study is to test the prototype of the CoffeeNow app with users.

## Method:

We will use the “think-aloud” technique to evaluate whether our application works by answering the following research questions:

Do users place their order successfully in the CoffeeNow app?

Did users stop at any steps and ask questions?

If yes, what did they ask?

Did users make any comments on the features/labels while they were using the application?

If yes, what are their comments?

Do users think the app save their time?

Do they see themselves using this application if it is available?

Why/Why not?

## Participants:

We will recruit one male and one female to participate in this study. They must drink coffee regularly and own a smart phone. We believe they are suitable users because our application is designed to match their needs and our interview findings indicate that they are more likely to use it than people who do not drink coffee regularly. We will consider two randomly selected individuals from the previous research/interview assignment and invite them to evaluate our prototype.

## Prototype Tool:

CogTool.

## Procedure:

We will start by informing our participants what we are interested in (i.e., what they say to themselves when they use the CoffeeNow application to order a Dutch flavored coffee, with a shot of espresso, and with cream and sugar). They are asked to talk aloud constantly as they do the task. We will then show them the prototype of our application and ask them to use it. We will observe their behavior, facial expression, and record what they say as they verbalize their thinking process. After they complete the task, we will ask them three follow-up questions. This think-aloud interview is intended to be 10 minutes.

## Data:

Notes on users’ behavior, questions, and comments about the CoffeeNow application.

## Result:

The outcome of our protocol analysis will address our research questions (i.e., the five questions under Method) and give us a more detailed insight into how the CoffeeNow app is working.

## Prototype:

See attached CogTool file.