### 1. Introduction

#### 1.1 Purpose

The purpose of this document is to provide an overview of the project and the planned development specifications, as agreed upon by the client and the development team. This document will outline the tools by which the application will be built, as well as a detailed description of the completed project, to be submitted to the client.

### 1.2 Application Summary

Coffee Badger Press is a content aggregator, aimed at presenting articles from predetermined websites provided by the client.

### 1.3 Specifications

The application will present the articles in a format thematic of a classic newspaper, able to be printed out if needed. The user will be able to specify a desired date range, which the application will pull all articles within this range. The application will also provide an "all recent articles" function that will present all articles that have been published since the last time the application had been run. At a minimum, articles will be pulled from *acoup.blog* and *insideofknoxville.com*. Additional websites added to the scraper will be agreed upon by the client and the dev team.

## 2. Design/System Architecture

### 2.1 Frontend

Coffee Badger Press will run as a native desktop application, providing a graphical user interface built with Python packages. The GUI will include a date range feature to pull all articles within the selected date, as well as a feature to pull all articles since the last time the user ran the application.

### 2.2 Backend

The articles will be pulled from websites using a web scraping script built with Python. The script will use the libraries *requests* and *Beautiful Soup* to scrape the necessary data from the websites. A Script will push the article text into a premade style sheet using HTML and insert it into a printable file.

### 2.3 Data Storage

Coffee Badger Press will be developed without a database. Articles will be pulled from the websites directly at the time the application is run. The date the last time the application is run will be saved to a separate text file, used by the "all recent articles" function to check how far back to look for articles. Article text and all necessary data pulled from the websites (author, title, images, etc.) will be stored to (a) text file(s).

### 3. User Design Interface

#### 3.1 Presentation

Coffee Badger Press will be run as a desktop application, with a simple UI. The user will have three interactable features. The first will be a "date range" function, with a button adjacent to this to run it. The third feature will be a "All Recent Articles" button set apart from the other two.

### 3.2 Functionality

The "Date Range" function will allow the user to include a start and end date from which they want to receive articles. This will include a button to run the application once the dates are set.

The "All Recent Articles" button will provide all articles to the user from the time they last ran the application, to the present. This button will run the application upon pressing and will not need or use the "Date Range" feature.

### 3.3 Graphic



### 4. Milestones

### 4.1 Scope

The development of the project will start upon the mutual signing of this document, with a completed form of Coffee Badger Press presented to the client by end of year. To the client's satisfaction after review of the finalized application, the project will be considered complete.

The development team will conceptualize and build the project so that it conforms with what was outlined previously in this document. Any additional features or websites to be added to the tool will be agreed upon by the client and the development team. This will be listed and added to this document in an "Addendum" section.

# 4.2 Development Schedule – Project completion: Mid/End-April

The web scraping tool and client-side UI will be completed by the end of February, and mid/end of March respectively. Combining these two tools in a workable form of the application will be complete by the beginning of April. Testing and bug fixing will take a few weeks, with the project presented to the client for review by mid/end of April.

| COFFEE BADGER PERSONALIZED NEWSPAPER |          |       |       |
|--------------------------------------|----------|-------|-------|
| TASKS                                | FEBRUARY | MARCH | APRIL |
| WEB SCRAPER TOOL COMPLETED           |          |       |       |
| CLIENT-SIDE UI<br>COMPLETED          |          |       |       |
| WORKABLE FORM OF APPLICATION         |          |       |       |
| TESTING AND BUG<br>CONTROL           |          |       |       |
| APPLICATION<br>PRESENTED TO CLIENT   |          |       |       |

# 5. Agreement

The use of this software and its contents belong to the client of the CITC2380 team, not the CITC2380 team (henceforth referred to as "the team").

The team has agreed to deliver the product outlined in the above document to the client as part of an educational requirement for Pellissippi's CITC2380 course. There will be no financial gain on the part of the team for developing and delivering said product. The rights and intellectual property of the product belong to the client of the product and not the team.

The client and the team have both agreed to the specifications of the product as outlined above; if changes to the product are necessary or desired by the client, the original documentation shall not be changed. Instead, addendums will be added to the end of the documentation along with confirmation of approval of said changes.

| X             |  |
|---------------|--|
| Client        |  |
| x Ryan H.     |  |
| Team Member 1 |  |
|               |  |
|               |  |
| X             |  |
| Team Member 2 |  |
|               |  |
|               |  |
| X             |  |
| Team Member 3 |  |