

# Final Project Data Checkpoint

## Project code:

[https://github.com/elaineyel117/SI507\\_final\\_receipt](https://github.com/elaineyel117/SI507_final_receipt)

## Data sources

Data from scraping:

URL: <http://www.recipepuppy.com/>

Access techniques: beautifulsoup, cache, json

Data summary:

- recipe title(text) and url(text) from html scraping
- ingredients(user input)

User will be able to give an input of any combination of ingredients, then the website will return a list of recipes in HTML format. Then I will use beautiful soup to parse it and obtain recipes name and url with option of radio button. If user choose one of them and submit it. Then the recipe will be save into the database. And then user will be presented by a table with recipes they liked with url in a table format. If user clicks on url, they will be directed to the actual recipe instruction website.

Cache will be used if user searched same ingredients, in which key would be the url and values are parsed html.

For each request to the website, user will be given top 9 recipe. The most important thing in the result are recipe name and url. If user click on the url, they will be directly linked to the instruction page, if they choose to save it, then the name and url will be saved into the database along with the ingredients they searched.

Evidence of caching:

```
scraping.py  {} cache.json  {} test.html
{} cache.json  http://www.recipepuppy.com/i_onions
1  <?http://www.recipepuppy.com/i_onions: "    <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/
DTD/xhtml1-strict.dtd"><html xmlns="http://www.w3.org/1999/xhtml">    <head>      <meta http-equiv="Content-Type" content="text/html;
charset=UTF-8"/>      <title>Onions Recipes with Onions - Recipe Puppy</title>      <link href="/cssjs/style.css?33" type="text/css"
media="screen" rel="stylesheet"/>      <link rel="shortcut icon" href="/favicon.ico"/>      <link rel="search" type="application/
opensearchdescription+xml" title="Recipe Puppy: Search by Ingredients" href="http://www.recipepuppy.com/rpopen.xml"/>      <link
rel="search" type="application/opensearchdescription+xml" title="Recipe Puppy: Search by Keyword" href="http://www.recipepuppy.com/
rpkeyword.xml"/>    </head>    <body>      <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.4.2/jquery.min.js"></script>
<script src="http://recipelabs.s3.amazonaws.com/layout/jquery-ui-1.8.16.custom.min.js"></script>      <div class="network">      <div
class="networkinner">        <ul>          <li><a style="padding:0" href="http://recipelabs.com"></a></li>          <li><a href="http://recipelabs.com">Create a Recipe</a></
li>          <li><a href="http://www.recipepuppy.com/email/">Daily Recipes by Email</a></li>          <li><a href="http://www.
ingredientpairings.com">Ingredient Pairings</a></li>          <li><a href="http://restaurantcoupons.us">Restaurant Coupons</a></li>
<li><a href="http://recipepuppy.com">Recipe Search by Ingredients</a></li>        </ul>      <script type="text/javascript">      $
(document).ready(function() {      });    </script>    <style>      body{ padding:0;margin:0; }      .network{ background-color:#2d8802;
border-bottom:1px solid #1d7802;color:#FFF;z-index:5;font-family:'Ubuntu',arial,sans-serif; }      .networkinner{ width:100%;margin:0
auto;height:36px; }      .network ul{ margin:0;line-height:12px; }      .network li{ text-align:left;float:left;display:block;height:36px;
list-style-type:none;margin:0;padding:0; }      .network li a{ display:block;font-size:14px;padding-top:10px;padding-left:10px;
padding-right:10px;color:#FFF;text-decoration:none;font-weight:bold; }      .network li a#homelink{ color:#444;font-weight:bold; }
      .network li a#homelink:hover{ color:#444; }      .network li a:hover{ text-decoration:underline; }      .networkinner div{
background-color:#f7f3e7;border:5px solid #e3ddd1;position:relative;top:-60px;left:10px;display:none;-webkit-border-radius: 10px;
-moz-border-radius: 10px;border-radius: 10px; }      .networkinner div li{ float:none;border-bottom:1px solid #AAA;height:auto;
padding:2px 5px; }      .networkinner div li a{ border-top:none;font-size:10px; }      .networkinner div li a:hover{
background-color:#FFF; }      .featured{ background-color:#43970e;z-index:4; }      .featured li{ list-style-type:none; }
      .featuredinner{ width:988px;margin:0 auto;height:70px;padding-top:30px;text-align:center; }      #loginbox{display:block;position:absolute;
}    </style>    </div>    </div>    <script type="text/javascript">      window.google_analytics_uacct = "UA-367787-22";    </
script>    <div class="header">      <h1><a href="/"></a></h1>      </div><div class="searchbox">      <form name="f" action="/"
method="get">        <b class="first">Search by Ingredients (comma separated):</b>        <a href="/advanced?i=onions"
style="font-size:10px">Advanced Search</a>        <input type="text" name="i" (id="addTop") class="focus" size=45 value="onions
"/>
```

## Database

- Database schema (SQL CREATE TABLE statements indicating table names, fields, data types, and constraints)

```
create_ing = '''
CREATE TABLE "Ingredients" (
    "Id" INTEGER PRIMARY KEY AUTOINCREMENT UNIQUE,
    "name" TEXT NOT NULL
);
'''
```


```
# drop_recipe = '''
# DROP TABLE IF EXISTS 'Recipe';
# '''
```

```
create_recipe = '''
CREATE TABLE 'Recipe' (
    'Id' INTEGER PRIMARY KEY AUTOINCREMENT,
    'Recipe_Name' TEXT NOT NULL
);
'''
```

```
# drop_rec_ing = '''
#     DROP TABLE IF EXISTS 'Rec_Ing'
# '''
```

```
create_rec_ing = '''
    CREATE TABLE 'Rec_Ing' (
        'Rec_Id' INTEGER REFERENCES Recipe(Id) ON UPDATE CASCADE,
        'Ing_ID' INTEGER REFERENCES Ingredients(Id) ON UPDATE
CASCADE
    );
'''
```

- Table Rec\_Ing has two foreign keys that reference to ID in table Ingredients and Recipes respectively.
- Screenshots showing some of the data in each of your tables

Table:  Ingredients

	Id	name
	Filter	Filter
1	1	Egg
2	2	potato
3	3	onion
4	4	garlic

Table:  Rec\_Ing

	Rec_Id	Ing_ID
	<input type="text" value="Filter"/>	<input type="text" value="Filter"/>
1	1	2
2	1	3
3	1	4
4	1	1

Table:  Recipe

	Id	Recipe_Name
	<input type="text" value="Filter"/>	<input type="text" value="Filter"/>
1	1	Omletes
2	2	chiken soup
3	3	noodles
4	4	pizza

## Interaction and Presentation Plans (1/2 page)

User will interact with the application on a webpage, they will input ingredients on the index.html, then the return list of recipes will be presented on the webpage as well. On the main page there will be a link that direct user to the page where saved their favorite recipes. The favorite recipes page will collect data after user submit a form. The presentation technologies are flask.