CS 320: Software Engineering
Group 5
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Prompt: Using the Function Points methodology discussed in class, compute the Function Points for the software that you are developing. As a guideline to what each computation should look at, take a look at slide 15 of the Software Metrics slide bank on Canvas, under week 8. Mention and explain what you are using as Internal Logical Files, External Interface Files, External Inputs, External Outputs, and External Inquiries. Include your (each student's) name as part of the name file.

Internal Logical Files:
Definition: "User-identifiable group of related data maintained within the application."
In the context of our project, ILFs are the tables in our project's database, as they are interrelated data that is maintained within our application. These tables are the following:

1) Users
2) Meals
3) FavoriteMeals (named userfavorites in the database)
4) Preferences
5) Allergies

External Interface Files:
Definition: "User-identifiable group of related data referenced by the application but maintained within another application."
In the context of our project, EIFs are the following:

1) Interaction with Auth0: As our main authenticator, Auth0 will be utilized by us to store sensitive user information such as passwords.
2) Webscrapped Menus: We will be webscrapping college dining menus from each of their respective dining commons' menus.

External Inputs:

Definition: "Unique elementary process that processes data coming from outside the application boundary."
In the context of our project, these are the inputs that our user will give us, and there are a couple of scenarios to discuss:

1) Updating Profile: Updating user name, allergies or preferences via profile page.
2) Reviewing Dining Hall: Leaving a review for a particular dining hall via commenting on its page.

3) Favoriting meal: Favoriting a particular meal via the star/heart button next to it via search tool.

External Outputs

Definition: "Unique elementary process that sends data outside the application boundary. Calculations, derivation of data, or maintenance also takes place. "
In the context of our project, this will be the following:

1) Curated menu per user: Generated on a particular dining hall's page after taking into account the preferences of the user.
2) Favorites List: Generated in the profile page, this is where a list of the user's favorite meals will be displayed. Said user will also receive an email when that particular dish is back on the menu for the day.
3) Meal Search: Meal search result takes into account whether the meal is on a particular dining hall's menu, only then will it be displayed in search results.

External Inquiries

Definition: "Unique elementary process that sends data outside the application boundary. Calculations, derivation of data, or maintenance do not take place."
In the context of our project, this will be the following:

1) Dining Hall Listing Page: A listing of all the dining halls currently in all five-college campuses. This contains information about the ratings of each dining hall as well as the hours in which they are open.

Function Points Calculation:

ILF = (2 * 7) + (3 * 10) = 44
EIF = 7 + 10 = 17
EI = 4 + 3 + 6 = 13
EO = 7 + 5 + 7 = 19
EQ = 3

Total = 44 + 17 + 13 + 19 + 3 = 96