**Final**

**(Groups with 4 members)**

**Part 1: Online Food Platform, CPPFoodDelivery**

**At least 4 Design Patterns(Must state design patterns used in implementation and why you selected)**

Create an online food delivery platform that connects **Customers**, **Restaurants** and **Drivers** to facilitate the ordering and delivery of food from Restaurants to Customers delivered by Drivers. Additionally, your system will include time. Meaning restaurants will only fulfill orders during operating hours. Additionally, drivers will only work at a given shift and deliver items in their chosen county.

All 3 must register with your online food Platform called **CPPFoodDelivery**. Additionally, in your main driver you will create 4 restaurants, 8 drivers and 10 customers showing the interactions of registration with the platform, customer ordering and driver delivery.

**Driver Time shifts Southern California County**

1st shift: 8AM - 4PM LA County

2nd shift: 4PM - 12AM Orange County

3rd shift: 12AM - 8AM San Bernardino County

**Restaurants** **Customers** **Driver**

Name name name

Address address address

County county operating county

Operating Hours dietary restrictions(hw4)

Cuisine type-mexican,thai..etc

Menu:

3 optional meal toppings(hw5)

4 meals:

Meals will include fats, carbs, protein

that will be altered for customer food

restriction.

Orders should include: restaurant, customer, dietary restriction, list of food items[including modifications based on customers dietary restrictions and any optional toppings selected], driver, order creation time(Customer), order pick up time(Driver picks up order) and delivered time(Driver drops off order to Customer).

**Part 2: OOA and OOD for Netflix competitor, CPPMovies**

Follow the steps for OOA and OOD to create a movie/tv streaming service like Netflix, Hulu, Disney+…etc, called CPPMovies.

NOTE: This will not be implemented in code!

**You are doing the analysis and design phase only.**

You are free to communicate outside your group but, this section will be graded comparatively to other submissions.

**Requirements**

System must:

allow users to watch movies and tv shows

allow users to search movies and tv shows by name and category

System should:

Be fast so users have a smooth experience (proxy)

display subtitles

Recommend videos to specific user

**Use cases**

|  |
| --- |
| Title: Register User |
| Primary Actor: Guest User |
| Success Story: Guest User wants to sign up for subscription to CPPMovies. Guest User enters their email, username, password, subscription plan, and credit card details. System displays a success message and returns to the login page. |

|  |
| --- |
| Title: View Video Description |
| Primary Actor: User |
| Success Story: User selects a video. System displays a video description page with information and options about video: description, runtime, play video, and closed captioning. |

|  |
| --- |
| Title: Play video |
| Primary Actor: User |
| Success Story: User is viewing a video description page. User selects to watch video (movie/show). System begins playback of video. |

|  |
| --- |
| Title: Display subtitles |
| Primary Actor: User |
| Success Story: During video playback, user chooses closed captioning. User chooses a language. System displays the subtitles. |

|  |
| --- |
| Title: Search videos by name |
| Primary Actor: User |
| Success Story: User chooses to search for movies and tv shows by name. User enters title of movie/show. The system returns a list of possible matches of movies and shows based on the title given. |

|  |
| --- |
| Title: Search videos by category |
| Primary Actor: User |
| Success Story: User chooses to explore movies and tv shows by category. User chooses a category of the list of categories. System displays a list of movies and tv shows. |

|  |
| --- |
| Title: Filter movies |
| Primary Actor: User |
| Success Story: User has a list of movies and shows given. User selects to filter by movies. System displays the list of movies without the tv shows. |

|  |
| --- |
| Title: Filter tv shows |
| Primary Actor: User |
| Success Story: User has a list of movies and shows given. User selects to filter by tv shows. System displays the list of tv shows without the movies. |

INSERT USE CASE DIAGRAM HERE

**Extracting information** from User Stories' or Use Cases to create class(NOUNS) and member functions(VERBS)

**Play video:** User is viewing a video description page. User selects to watch video (movie/show). System begins playback of video.

**View Video Description:** User selects a video. System displays a video description page with information and options about video: description, runtime, play video, and closed captioning.

**Display Subtitles**: During video playback, user chooses closed captioning. User chooses a language. System displays the subtitles.

**Search Videos by Name**: User chooses to search for movies and tv shows by name. User enters title of movie/show. The system returns a list of possible matches of movies and shows based on the title given.

**Search Videos by Category**: User chooses to explore movies and tv shows by category. User chooses a category of the list of categories. System displays a list of movies and tv shows.

**Filter Movies**: User has a list of movies and shows given. User selects to filter by movies. System displays the list of movies without the tv shows.

**Filter TV Shows**: User has a list of movies and shows given. User selects to filter by tv shows. System displays the list of tv shows without the movies.

**Possible Classes**: User, VideoDescriptionPage (video content), Video (movie and show), System (CPPMovies), ClosedCaptioning/Subtitles, language enum?, VideoResultsPage, category enum?

|  |  |
| --- | --- |
| **Class name:** | User |
| **Responsibilities:** | **Class Collaborations:** |
| * Store user data | * CPPMovies |

|  |  |
| --- | --- |
| **Class name:** | CPPMovies |
| **Responsibilities:** | **Class Collaborations:** |
| * Register user * Login/logout user * Edit user profile * Add/remove video to/from watchlist * open video content * register video * display videos | * User * VideoContent * Catalog |

|  |  |
| --- | --- |
| **Class name:** | Catalog |
| **Responsibilities:** | **Class Collaborations:** |
| * Add video * Search video by name * Filter video by category * Filter video by type | * CPPMovies |

|  |  |
| --- | --- |
| **Class name:** | VideoContent |
| **Responsibilities:** | **Class Collaborations:** |
| * Play video * Pause video * Rewind video * Display description * Change video settings * Store video details | * CPPMovies |

INSERT CLASS DIAGRAM HERE