**CS673 Software Engineering**

**Week 7 (10/15 - 10/21)**

**Date and Time:** 10.16 9:00 - 9:30PM

**Place**: Zoom Meeting

**Participants:** Duan Lin, Bhavesh Tadikonda, Shuyi Zheng, Ming Yuan, Hussain Alibrahim,Neha Jadhav Sarnaik,Shreyas Prakash

**Minutes taker:** Duan Lin

**Timekeeper:** Duan Lin, Bhavesh Tadikonda

**Purpose:** Present Weekly Project Process

**Agenda:**

* Remind team members and keep track of the group’s progress in home page & product page design.
* Update weekly progress report.
* Discuss Iteration 1’s presentation plan and ensure Iteration1’s functionalities.

**Discussions:**

* Discuss the Iteration 1’s presentation plan: implement two main functionalities: Sign up & Login, Homepage design.

**Key Decisions:**

* For our homepage we only select three or four products.
* Hussain continues the product page design and Shuyi continues the login register page design.
* Whenever there needs to be a connection from Front-End, the Back-End team will assist to solve the problem in terms of Jinja2.

**Action Items:**

* Revise the SPPP document on our initial purpose and discuss why we only choose dairy products:
  + The reason could be clear: For health, they are important for building healthy bones and for maintaining a healthy weight.
* Front - end:
  + Shuyi continues the basic homepage html, sign up html and login html.
  + Hussain added our product logo, helped Shuyi on homepage html, and continues on the product page.
* Back - end:
  + Duan finished user authentication with Ming, starts on testing
  + Shreyas finished the YAML files and successfully posted to DB.
  + Shreyas and Neha will start to write several initial routes in Flask and test DB operations on the Product part.
  + Neha finished the third-party login.

**Week 5-6 (10/1 - 10/14)**

**Date and Time:** 10.9 9:00 - 9:30PM

**Place**: Zoom Meeting

**Participants:** Duan Lin, Bhavesh Tadikonda, Shuyi Zheng, Ming Yuan, Hussain Alibrahim,Neha Jadhav Sarnaik

**Minutes taker:** Duan Lin

**Timekeeper:** Duan Lin, Bhavesh Tadikonda

**Purpose:** Present Weekly Project Process

**Agenda:**

* Remind team members and keep track of the group’s progress in home page & product page design.

**Discussions:**

* The main content displayed on the homepage?
  + Only display less featured product pictures
* How to fetch products from DB to the product page?
* Front-End and Back-End connection: Jinja2
* When to start third-party login design? Next week.
* How to set valid user information format? Regex(regular expression)

**Key Decisions:**

* For our homepage we only select three or four products.
* Hussain continues the product page design and Shuyi continues the login register page design.
* Whenever there needs to be a connection from Front-End, the Back-End team will assist to solve the problem in terms of Jinja2.

**Action Items:**

* Revise the SPPP document on our initial purpose and discuss why we only choose dairy products:
  + The reason could be clear: For health, they are important for building healthy bones and for maintaining a healthy weight.
* Front - end:
  + Shuyi starts the basic homepage html, sign up html and login html.
  + Hussain designed our product logo, helped Shuyi on homepage html, and will start to design the product page.
* Back - end:
  + Duan continue to work on user authentication with Ming
  + Shreyas finished the YAML files and successfully posted to DB.
  + Shreyas and Neha will start to write several initial routes in Flask and test DB operations on the Product part.
  + Neha started on the third-party login.

**Week 4 (09/24 - 09/30)**

**Date and Time:** 9.25 9:45-10:45PM

**Place**: Zoom Meeting

**Participants:** Duan Lin, Bhavesh Tadikonda, Shuyi Zheng, Shreyas Prakash, Ming Yuan, Neha Jadhav Sarnaik

**Minutes taker:** Shuyi Zheng, Duan Lin

**Timekeeper:** Duan Lin

**Purpose:** Back-End Configuration and Front-End Collaboration

**Agenda:**

* Determine the data configuration language: YAML or JSON?
* Determine the User & Product collections in MongoDB
* Determine some initial routes to implement

**Discussions:**

* Data configuration format in Flask
  + YAML or JSON? - yaml is more human-readable data language, json is too complex
  + Using YAML parser to convert it to JSON format
  + Front end get and read JSON with jinja or js
* Add “category” in collection Product
* Display product description in Front-End or read JSON from DB.
  + Answer: read JSON from DB
* Start to implement an initial route to put some product items in DB.

**Key Decisions:**

* Using YAML in Flask to configure schemas and then parse it into JSON format.
* Display product description from DB with jinja2

**Action Items:**

* Requirement brainstorming - user story in pivotaltracker
* Front - end:
  + Shuyi Start with homepage html
  + Hussain start with product page html
* Back - end:
  + Duan continue to work on user authentication with Ming
  + Shreyas and Neha will start to write several initial routes in Flask and test DB operations on the Product part.

**Week 3 (09/17 - 09/23)**

**Date and Time:** 9.18 9:30-10:45PM

**Place**: Zoom Meeting

**Participants:** Professor Yuting Zhang, Duan Lin, Bhavesh Tadikonda, Shuyi Zheng, Shreyas Prakash, Hussain Alibrahim, Ming Yuan, Neha Jadhav Sarnaik

**Minutes taker:** Shuyi Zheng, Duan Lin, Hussain Alibrahim

**Timekeeper:** Duan Lin, Hussain Alibrahim

**Purpose:** Third Party Login Features and Payment Security Risks Discussion

**Agenda:**

* Determine the website login approach: manually login & third-party login portals (OAuth, Google, Facebook, etc)
* Determine whether we should implement payment gateway (Stripe) in the Iteration 1
* Discuss with the professor on new features and ask for some suggestions about security risks and problems.
* Subteams’ weekly summaries and reports:
* Back-end part:

1. Create database: dairy\_user\_info, and collection: User
2. Run localhost HTTP server and implement 3 routes: register, login and search.
3. Use MongoClient / MongoEngine to connect Flask to DB.
4. Successfully read the registration forms from HTML and correctly add a document into MongoDB.

* Front-end part:

1. UI design
2. Start with static pages

**Discussions:**

* Convert UI to HTML
  + Static pages with html/css first
  + Dynamic pages with javascript later
* How front-end and back-end connected
  + front - end to back - end, e.g. user info collecting: <action=
  + end - font to front - end, e.g. the name would be showed on website after login: jinja2
* Problems
  + payment system: financial legally?
  + storing addresses and phone numbers: privacy problems

Solution: Fake payments and stuff

Reason: Not expecting expert level work, so no need to push this as a real product. The learning experience is the most important

* Iteration 0 presentation
  + Time: 10 minutes
  + Requirements:
    - NO NEED FOR DEMO
    - Gotta make sure to emphasize how you will apply quality assurance
* Teamwork arrangement:
  + Code review and github branching scheme as well
  + Manage git branches
  + Organize separate meetings for front end and back end

**Key Decisions:**

* How to connect front-end and back-end
* Solve payment and privacy issues
* Add code review part to weekly meeting

**Action Items:**

* Front - end:
  + Shuyi Start with homepage html
  + Hussain start with product page html
* Back - end:
  + Duan continue to work on user authentication with Ming
  + Shreyas, Bhavesh, Duan and Neha started working on API design and created the Initial route for the application. Working with the front end team to get a complete end to end workflow working for initial functionality.

**Week 2 (09/10 - 09/16)**

**Date and Time:** 9.11 9:30-10:30PM

**Place**: Zoom Meeting

**Participants:** Duan Lin, Bhavesh Tadikonda, Shuyi Zheng, Shreyas Prakash, Hussain Alibrahim, Ming Yuan

**Minutes taker:** Shuyi Zheng, Duan Lin

**Timekeeper:** Duan Lin, Hussain Alibrahim

**Purpose:** Grouping & Function Design

**Agenda:**

**Let Bhavesh Tadikonda briefly introduce our project’s general purpose, what kind of users are targeting? Just give us a clear example and understanding of the dairy e-commerce web app.**

* Determine e-commerce type/theme: dairy product
* Determine subteam and tasks assignment:

Let me know if you have any experience in web app design? Which part can you contribute to?

* Backend part:

1. Who implements? What functionalities?
2. Determine which database we use? (MongoDB or MySQL or..)
3. Determine schemes we use? (User table: username, date of birth, gender, password, etc.) & (Payment table: user\_account, user\_behavior, etc.)
4. Authentication of users? Which protocol need to be used for authentication of users
5. Determine routes methods(GET/POST) in functional requirements
6. Any ideas?

My idea: I think we can first finish the back-end part, like we design the routes and api, and then make some simple pages for testing these methods.

* Front-end part:

1. Who implements?
2. Determine the homepage initial layout(HTML,CSS,Bootstrap...) and how many sections (based on different functionalities, user (profile, settings), payment (user payment history, shopping cart)) need to be designed/displayed? (<https://www.dfamilk.com/>) . A static website is ok for our 1st version.
3. Any ideas?

* Requirement/testing part:
  + Documentation
    - Team logo
  + Functional Objective
    - Web function
    - Web UI
    - DB design
  + Non-functional objective
  + User case

**Discussions:**

* Determine e-commerce type/theme: dairy product
* Determine subteam:
  + Front - end sub-team: Shuyi Zheng, Hussain Alibrahim
  + Back - end sub-team: Duan Lin, Ming Yuan, Bhavesh Tadikonda, Shreyas Prakash (API design)
  + Requirements & Docs: Shuyi Zheng, Duan Lin
* Backend part:

1. Set up a server
2. What functions?

* User Authentication:
  + user registration
  + user login
  + Error handling
* Order Checkout
  + Change product’s quantities in DB before checkout
  + Payment transaction behavior
  + Error handling

3. Determine which database we use?

* MongoDB(NoSQL)
* Frontend part:
  + Logo design: Hussain Alibrahim will finish by Saturday
  + Layout: Shuyi Zheng will finish by Saturday
  + Product icons
* Functional requirements:
  + Web
    - Navigation
    - Banner
    - Search
    - Sub-page
      * About us
      * Product
        + Product page
      * Account
    - Footpage
  + User
    - Register / login
    - Your account
      * Email address
      * Phone number
      * Address
    - Cart
      * delete
      * Checkout
    - Order history
    - Your save items
    - Sign out
  + Product
    - Save product
    - Add product to the cart
    - Order
      * address
      * checkout

**Key Decisions:**

1. Divide subteams members
2. Make sure teams’ tasks for the functionalities and decide DB type and git configuration.

**Action Items:**

1. Logo design
2. Website demo design
3. DB design

**Week 1 (09/03 - 09/9)**

**Date and Time:** 9.03 10-11PM

**Place**: Whatsapp Group Meeting

**Participants:** Shuyi Zheng, Duan Lin, Bhavesh Tadikonda, Shreyas Prakash

**Minutes taker:** Shuyi Zheng, Duan Lin

**Timekeeper:** Duan Lin

**Purpose:** Project Kickoff Meeting

**Agenda:**

* Determine project idea
* Determine an approach/process to use
* Determine project procedures
* Provide effort hours so far
* Finalize communication plan
* Brainstorm requirements
* Assign roles

**Discussions:**

* Determine project idea:
  + Theme: Food Diary
  + Type: Web Application, like : <https://www.dfamilk.com/>
    - Like micro e-commerce web app
* Determine an approach/process to use
  + Language: Python
  + Tech Stack: Flask, Cassandra, MongoDB(database), Jinja2
    - full stack application with respect to UI, RESTful API design and back end integration?
    - Django？complex
    - Back end - Cassandra?
    - Jinja2 along with basic HTML5, CSS3 for the UI
    - Back end mainly doing the payment part/ store user info/ login and reg
* Determine an approach/process to use
  + 1. Functional Requirements
  + 2. Non functional Requirements
  + 3. Low level Design
  + 4. System API’s
  + 5. Database Sharding mechanisms
  + 6. Cache memory eviction mechanism
  + 7. Load balancing mechanism
  + 8. whether our system should be more consistent or more available depending on CAP theorem.
  + 9. High level design considering all sharding mechanisms.
  + 10. Cost estimation, traffic estimation and load estimation
* Finalize communication plan
  + Whatsapp
  + Slack
  + Google drive
  + PivotTracker
* Brainstorm requirements
  + Web func
    - /Home
    - /Contact us
    - /Products
      * Processing the order
      * Payment confirmation
    - /Signup
    - /Login
      * /Account
      * /My order
* Assign roles
  + Team Leader: Duan Lin
  + Backup Leader: Bhavesh Tadikonda

**Key Decisions:**

* Project idea: e-commerce web app
* Language: Python, Javascript, HTML/CSS
* Time tracking
  + Check the requirement and assigned tasks at the weekend
* Source Code
  + Github (commit, push) for version control
  + License? MIT/Apache License

**Action Items:**

1. Submit available time to Duan Lin by whatsapp
2. Register for PivotalTracker and provide email address to Shuyi Zheng