SE 216 – SOFTWARE PROJECT MANAGEMENT
SOFTWARE PROCESS MODEL DOCUMENT

PROJECT NAME: Recipe Bank

GROUP MEMBERS: Atakan Acaroğlu, Hasan Efe Ünal, İdil Sanem Gürsoy, Fulya Aydın, Mert Can Erdoğan, Barış Özdemir

#	NECESSARY NEEDS FROM THE ORGANIZATIONAL PROCESS
1	Effective Communication: Transparency and open communication are fundamental to Scrum. Team members should feel comfortable sharing their ideas, concerns, and progress.
2	Teamwork: Team members should be willing to work together and support each other to achieve a common goal.
3	Adaptability: Products like recipe apps are constantly updated based on user feedback and market trends. The team should be able to quickly adapt to changing requirements and priorities.
4	Continuous Improvement: Scrum is based on the principles of continuous feedback collection and implementation. The team should focus on improving the app and optimizing the user experience.
5	Product Vision: Team members should have a clear understanding of the project's overall purpose and goals. This ensures that the product is developed consistently and meets user needs.
6	Sprint Planning: It is important to identify and prioritize the work to be done for each sprint in advance. This allows the team to stay focused and use their time effectively.
7	Daily Scrum Meetings: The team should hold short (15-minute) meetings to review daily progress and discuss any blockers. This facilitates easy tracking of project progress and quick resolution of issues.
8	Sprint Reviews: The team should hold regular (2-hour) meetings to present their completed work to stakeholders. This provides an opportunity to gather feedback and ensure the product is on the right track.
9	Sprint Retrospectives: The team should hold (1-hour) meetings to discuss how the sprint went and how they can improve future sprints. This contributes to the team's learning and continuous improvement.
10	Comprehensive Documentation: Scrum does not require detailed documentation of every step. However, it can be helpful to keep essential documents such as sprint plans, daily Scrum notes, and sprint review reports.
11	Formal Project Plan: Scrum does not require a detailed plan for the entire project to be created in advance. Sprint plans can be adapted and updated as the project progresses.

SE 216 – SOFTWARE PROJECT MANAGEMENT
SOFTWARE PROCESS MODEL DOCUMENT

SOFTWARE PROCESS NAME: AGILE (SCRUM)

SOFTWARE PROCESS DESCRIPTION:

Scrum is an agile project management framework specifically designed for iterative and incremental software development. It emphasizes collaboration, self-organization, and continuous improvement.

Roles:

- **Product Owner: Represents the stakeholders and defines the product vision and backlog (a prioritized list of features).**
- **Scrum Master: Facilitates the Scrum process, removes roadblocks, and ensures the team adheres to Scrum principles.**
- **Development Team: A self-organizing group responsible for developing the product.**

Artifacts:

- **Product Backlog: A prioritized list of features and functionalities for the product.**
- **Sprint Backlog: A subset of work selected from the product backlog for a specific sprint.**
- **Sprint: A time-boxed iteration (usually 1-4 weeks) where the development team focuses on completing a specific set of tasks.**
- **Increment: The working product functionality delivered at the end of each sprint.**

SOFTWARE PROCESS MODEL:

Sprint 1:

User Story 1: Users should be able to create a profile and edit their information.

Tasks:

- **Develop user registration/login screen**
- **Create user profile creation and editing forms**
- **Securely store user data in the database**

User Story 2: Users should be able to save their kitchen preferences (diet, cuisine type, etc.), allergies, and dietary restrictions.

Tasks:

- **Create fields for kitchen preferences, allergies, and dietary restrictions**
- **Save user-entered information to the database**

User Story 3: Users should be able to add and manage ingredients in their pantry, or automatically add ingredients through barcode scanning or image uploading.

Tasks:

- **Develop ingredient adding/management interface**
- **Barcode scanning and image recognition integration**
- **Adding and managing ingredients in the database**

Sprint 2:

User Story 4: Users should be able to track expiration dates and quantities of ingredients.

Tasks:

- **Add UI elements for expiration date and quantity tracking**
- **Create fields for expiration date and quantity information in the database**

User Story 5: Users should be able to create weekly or monthly meal plans and prepare shopping lists accordingly.

Tasks:

- **Develop meal plan creation and viewing screen**
- **Shopping list creation and management functionality**
- **Integration between meal plan and shopping list**

User Story 6: The application should suggest recipes based on users' pantry ingredients, kitchen preferences, and dietary restrictions.

Tasks:

- **Develop algorithm for recipe suggestions**
- **Create filtering mechanism based on user data and ingredient inventory**

Sprint 3:

User Story 7: Users should be able to search for recipes using filters such as keywords, category, cooking time, difficulty level, etc.

Tasks:

- **Add UI elements for advanced search filters**
- **Create mechanism for search queries in the database**

User Story 8: Each recipe should have detailed information including images, user reviews, and nutritional information.

Tasks:

- **Recipe detail page design and development**
- **Image uploading and storage**
- **Add functionality for user reviews**
- **Nutritional information API integration**

User Story 9: Users should be able to save and manage their favorite recipes.

Tasks:

- **Develop favorite recipes list creation and management interface**
- **Track user-marked favorite recipes in the database**

Sprint 4:

User Story 10: Users should be able to follow each other, create, share, rate and comment on their own recipes.

Tasks:

- **Develop follower system and profile pages**
- **Add recipe sharing, rating, and commenting functionality**

SE 216 – SOFTWARE PROJECT MANAGEMENT
SOFTWARE PROCESS MODEL DOCUMENT

REASONS TO CHOOSE THIS MODEL:

1. Rapid Development: Scrum enables the rapid development and delivery of functional product increments. This accelerates the process of obtaining user feedback and launching the product to the market.

2. Enhanced Quality: Scrum helps to enhance product quality by focusing on testing and feedback in every sprint. This ensures that errors are detected and fixed early.

3. Increased User Satisfaction: Scrum contributes to increased user satisfaction by placing user feedback at the core of the product development process. This ensures that user needs are met and the product becomes more user-friendly.

4. Reduced Risk: Scrum offers the opportunity to identify and manage risks early and frequently. This reduces the risk of project failure.

5. Adaptability to Changing Requirements: Recipe apps are continuously updated based on user feedback and market trends. Scrum excels in quickly adapting to changing requirements and priorities.