Chapter 3

Sprint 1

I. Introduction

This chapter is dedicated to the first sprint of developing an application, which involves setting up the project and establishing basic functionality. This sprint comprises three fundamental steps:

- Implementing a basic database schema to store job listings and user profiles.
- Implementing user authentication and authorization to secure user data.

II. Preparation

1. Sprint Goal

The main focus of this sprint is to implement user authentication and basic database functionality for storing user profiles and job listings. The implementation of user authentication and authorization is crucial in ensuring that the system is secure and users' sensitive information is protected. The basic database schema will enable candidates to store and manage their profile information, as well as allow recruiters to post job listings. The database will be designed with scalability in mind to accommodate future growth and changes to the system. The implementation of these features will provide a solid foundation for the rest of the project, allowing for the development of more advanced features and functionality in later sprints.

2. Product Backlog

We present in Table 4.1 the backlog for this sprint, along with the estimated effort per day for each functionality to be implemented.

ID	Theme	ID	User story	Priority	Estimation
1	login	1.1	As a User, I would like to authenticate myself to access the platform.	M	8
2	Manage Profile	2.1	As a Person, I want to be able to change my profile image	M	2

		2.2	As a Person, I want to be able to change my personal information.	S	2
		2.3	As a Person, I want to be able to upload my resume for potential employers to review.	M	5
3	Manage Job Application	3.1	As a Candidate, I want to be able to apply for job posts	M	2
		3.2	As a Candidate, I want to be able to consult job posts.	S	2
		3.3	As a Candidate, I want to be able to abandon the job application.	M	5
		3.4	As a Recruiter or Candidate, I want to be able to consult job applications.	M	5
4	Manage Job Posts	4.1	As a Recruiter, I want to be able to add job posts	M	2
		4.2	As a Candidate, I want to be able to delete job posts.	S	2
		4.3	As a Candidate, I want to be able to update job posts.	M	5
5	Manage Accounts	5.1	As an Administrator, I want to be able to Delete user	M	2
		5.2	As an administrator, I want to be able to consult user profiles.	S	2
		5.3	As an administrator, I want to be able to search for users.	M	5

Table 3.1: Project Backlog

III. Analysis and Design

Now that the requirements for our first sprint have been defined, we move on to the presentation of the global use case diagrams. The purpose of these diagrams is to provide an overview of all the functionalities provided by the application, along with textual descriptions that outline the scenarios for each use case. In this chapter, we will discuss the global use case diagrams developed for Sprint 1 of the project, providing insights into the design decisions and how they relate to the requirements.

1. Modeling global use case

The needs to be fulfilled in our first sprint have been specified. We now move on to the presentation of the use case diagrams, which aim to provide an overview of all the features provided by the application, as well as textual descriptions that describe the scenarios of each case.

1. Use case sprint 1

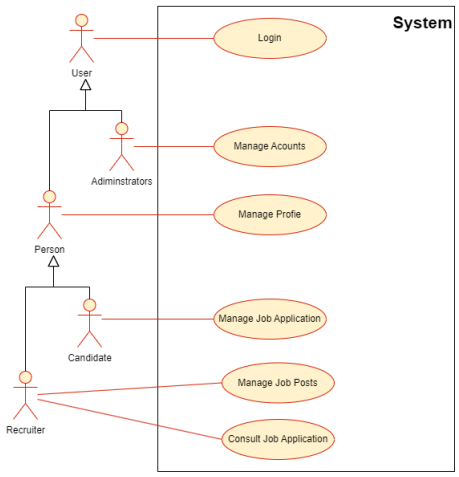

Figure 3.1: Caption

1.1. Refinement of use case «Manage user»

To manage users, an administrator has the ability to perform the functionalities modeled in figure 3.2 below.

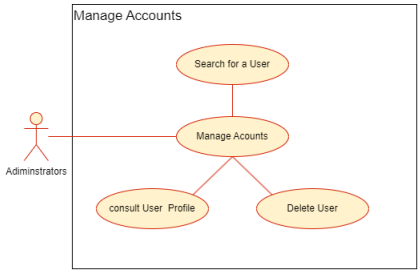

Figure 3.2: Caption

1.2. Refinement of use case «Manage Profile»

To manage users, To manage user profile, a Person has the ability to perform the functionalities modeled in figure 3.3 below.

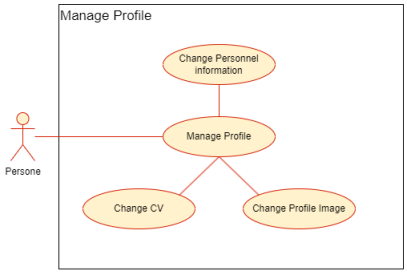

Figure 3.3: Caption

1.3. Refinement of use case «Manage Job Posts»

To manage job posts, a Recruiter has the ability to perform the functionalities modeled in figure 3.4 below.

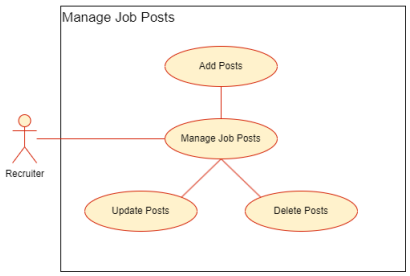

Figure 3.4: Caption

1.4. Refinement of use case «Manage Job Application»

To manage a job application, a Candidate has the ability to perform the functionalities modeled in Figure 3.5 below.

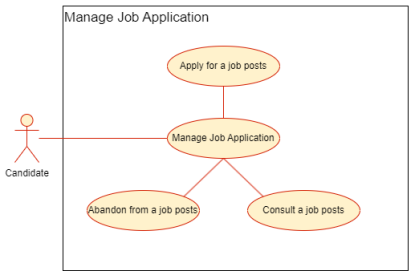

Figure 3.5: Caption

2. Sequence diagram

For a good understanding of the components of the first sprint, it is essential to present sequence diagrams of the main use cases. These diagrams describe the scenarios of each case by emphasizing the chronological factor, as well as the interaction between the different objects that make it up.

2.1. Sequence diagram «login»

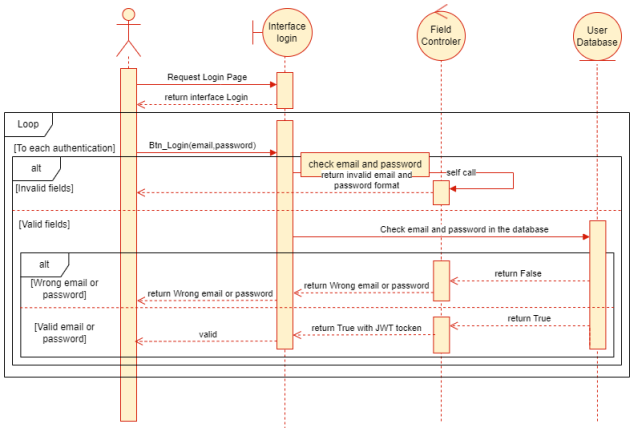

Figure 3.6: Caption

2.2. Sequence diagram «delete user»

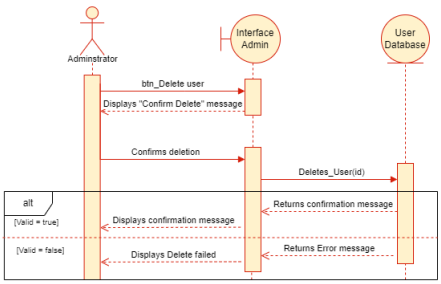

Figure 3.7: Caption

2.3. Sequence diagram «consult user»

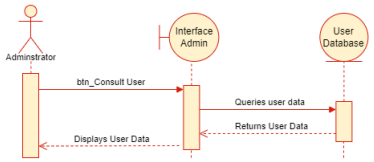

Figure 3.8: Caption

2.4. Sequence diagram «search user»

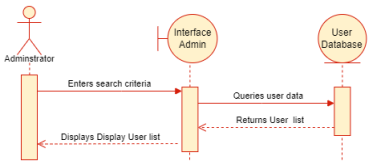

Figure 3.9: Caption

2.5. Sequence diagram «Add job Post»

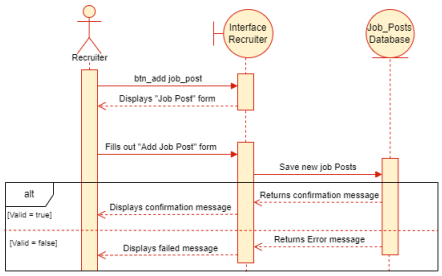

Figure 3.10: Caption

2.6. Sequence diagram «delete job Post»

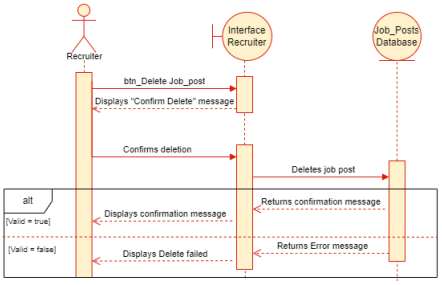

Figure 3.11: Caption

2.7. Sequence diagram «edit job post»

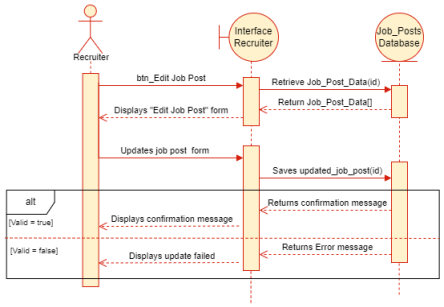

Figure 3.12: Caption

3. Diagram du class

The sequence diagram presented in the previous section allowed us to see a dynamic view of our system. In order to present the different entities that make up our system along with their various relationships in a static manner, we have dedicated this section to defining a diagram that is part of the structural diagrams of UML, which is the class diagram illustrated in figure 4.6 below.

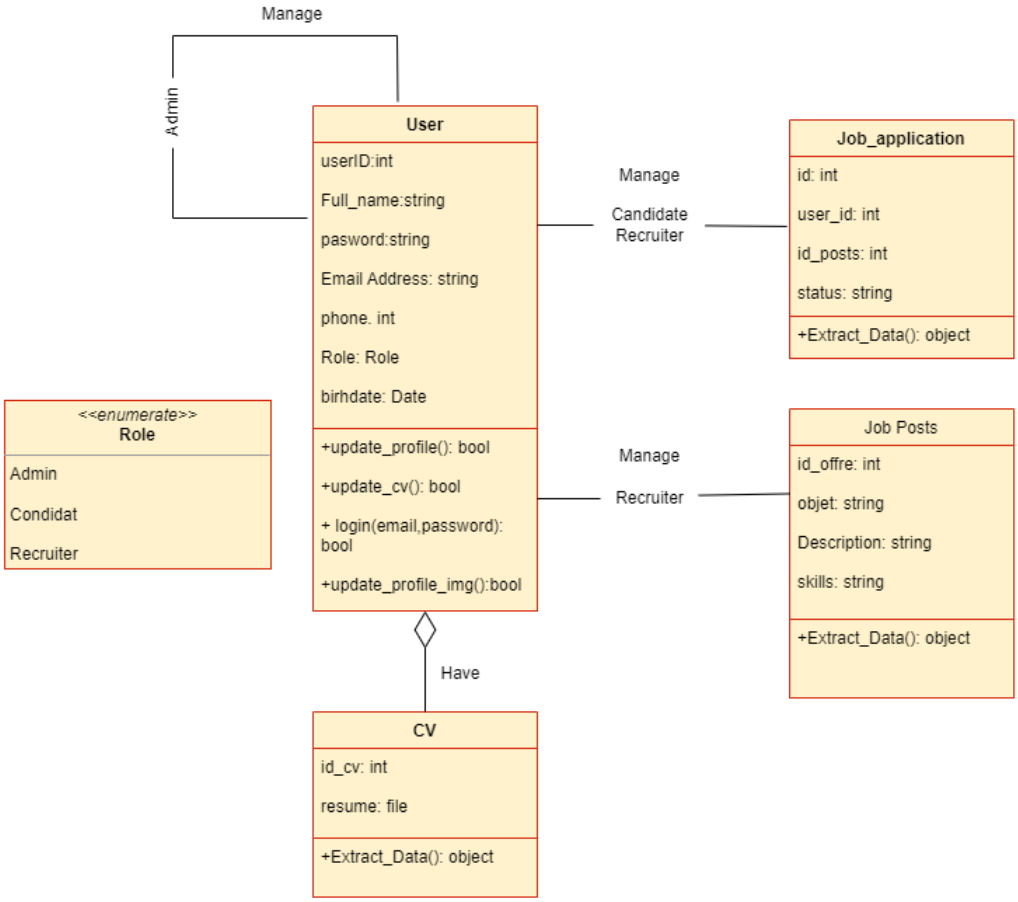

Figure 3.13: Caption

IV. Implementation

After presenting the conceptual solution, we will now showcase the fruit of our work by presenting the different interfaces that are most significant for this first sprint.

V. Testing

Conclusion

Through this chapter, we have presented the specification of needs, the design illustrated by detailed sequence diagrams and a class diagram, as well as the implementation of user stories for the first sprint. After testing and validating the features with the Scrum Master and the Product Owner during the sprint review, we will now move on to the next step: sprint 2.