Introduction to Software Engineering

SWE206

Lab Project – Talent Acquisition (TA) department

Section 51 – group 5

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TABLE OF CONTRIBUTION

Name	ID	Phase 1			Phase 2			Phase 3	All
		Requirements	Use Case Diagram	Use Case Description	Class Diagram	Activity Diagram	Sequence Diagram	Implementation	Report
Mohammed Alsahli	201934450	20%	30%	20%	40%	20%	20%	40%	50%
Ammar Almajed	201922810	20%	20%	25%	20%	25%	30%	30%	10%
Saad Alali	201955470	40%	30%	25%	20%	30%	25%	20%	10%
Ali Al-Khulaifi	201819180	20%	20%	30%	20%	25%	25%	10%	30%

PHASE 1

REQUIREMENT

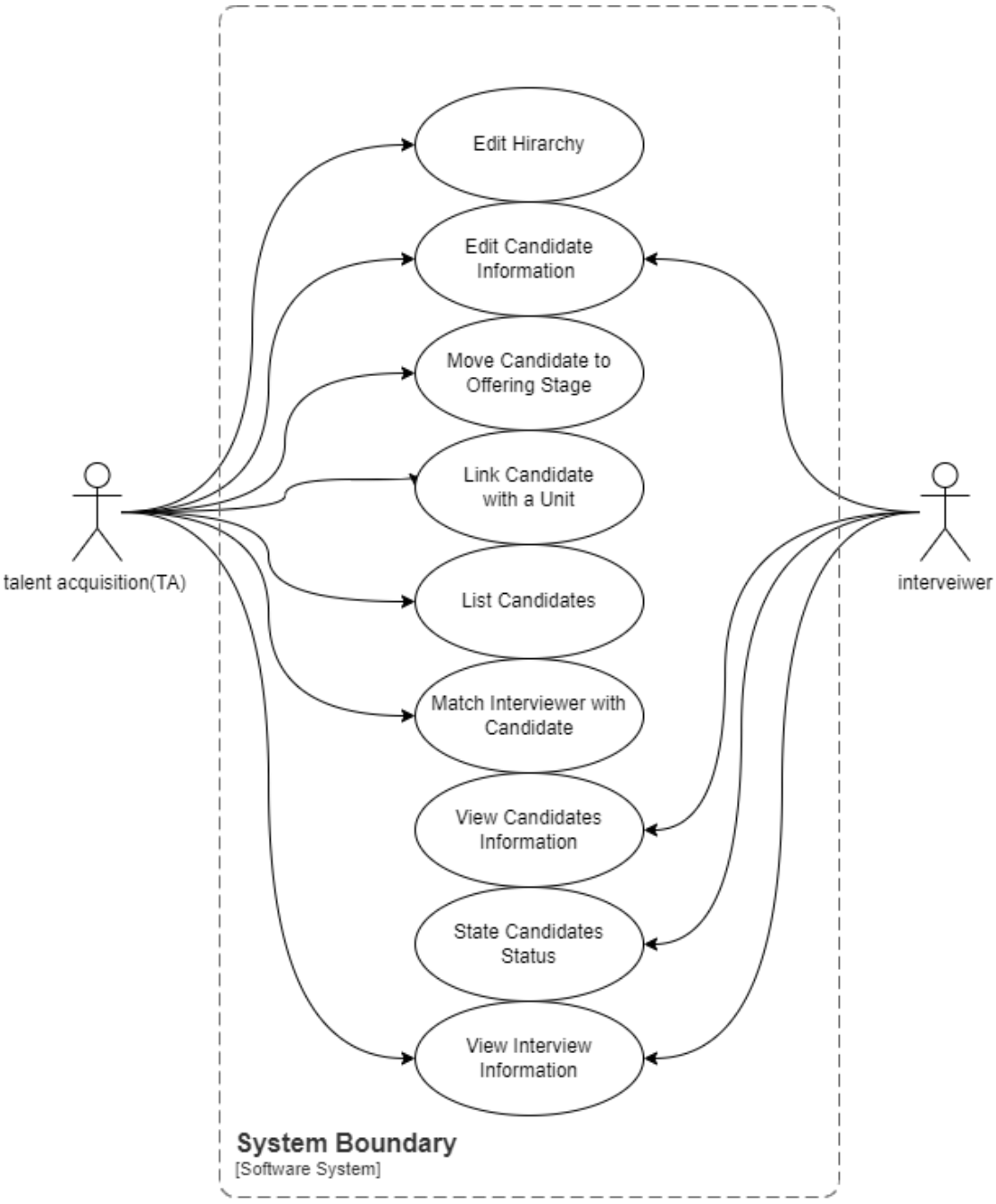
FUNCTIONAL

1- Generate proper jobs for each unit based on the bands connected to it
2- Modify the hierarchy
3- Add a hierarchy
4- List the candidates with their basic information Name, ID, Gender, years of experience, education level and a CV
5- Match proper interviewers for each candidate based on their jobs
6- If the interviewer chosen, system will find a free time in his calendar
7- Save the candidate interview Information: date, time, and interviewer (there could be more than one interview)
8- Results of the interview for each candidate weather he failed, pass, or hold
9- Move the candidates who passed to offering stage
10- link the new hired employee to one of the units in hierarchy
11- create a job offer considering the candidate position, salary breakdown, and other benefit

NON-FUNCTIONAL

1- system should be developed using java language
2- system should take no more than 5 sec to run
3- system should provide High security to save the candidates information
4- system should be able to read excel files
5- system should have high maintainability
6- system should provide hieratical structured database such that
    a. Each division consists of many directorates
    b. Each directorate consists of many departments
7- The TA should be able to access candidates' information
8- Candidates should go through clear processes
9- The system should follow the guidelines of the Ministry of Human Resources

USE CASE DIAGRAM



USE CASE DESCRIPTION

Use case ID:	1		
Use Case Name:	EDIT CANDIDATE INFORMATION		
Created by:	Mohammed Alsahli	**Last Updated by:**	
Date Created:	29/03/2022	**Last Revision Date:**	
Actors:	Talent Acquisition, Interviewer		
Description:	Change candidate information		
Trigger:	Edit button		
Preconditions:	Candidate has an active state.		
Postconditions:	Candidate information updated.		
Normal Flow:	Actor press Edit button System opens up editable slots Actor insert information into available/changeable slots Actor press Save button. System locks down slots System updates candidate information		
Alternative Flows:	3a. In step 3 of the normal flow, if actor selected non editable slot 1. A notification appears to let actor know that he cannot edit this slot 2. Use case resumes on step 4 of normal flow 4a. In step 4 of the normal flow, if actor didn't press save and left 1. A pop up window appears to let him know that he did not save and ask him to choose to save or discard 2. Use case resumes on step 5		
Exceptions:	4a. In step 4a of the alternative flow, if actor clicks discard 1. Notification of discarding appears 2. System goes back to previous stage		
Assumptions:			
Notes and Issues:	Non editable slots such as the date of signing the candidate in and his ID		

Use case ID:	2		
Use Case Name:	MOVE THE CANDIDATES TO OFFERING STAGES		
Created by:	Saad alali	**Last Updated by:**	
Date Created:	29/03/2022	**Last Revision Date:**	
Actors:	Talent Acquisition		
Description:	allows the admin(TA) to move the passed candidates to another stage to offer jobs for them		
Trigger:	Move		
Preconditions:	1. The candidate doesn't need any more interviews 2. The candidate status is passed		
Postconditions:	1. The candidate added to the offer stage list 2. The system offers a proper job for the candidate		
Normal Flow:	1. system prompt menu page 2. user click view candidates list 3. system prompt candidate list 4. user search for candidate 5. system show candidate information 6. user click move to offer stage 7. system moves the candidate to offer stage		
Alternative Flows:			
Exceptions:	6a. there is no candidate with the entered name 1. System shows not found massage 8a. the candidate status is not passed 1. System show error massage "the candidates did not pass"		
Assumptions:			
Notes and Issues:			

Use case ID:	3		
Use Case Name:	LINK CANDIDATE WITH A UNIT		
Created by:	Saad alali	**Last Updated by:**	
Date Created:	29/03/2022	**Last Revision Date:**	
Actors:	Talent Acquisition		
Description:	Allow actor to link a candidate to a unit		
Trigger:	Link		
Preconditions:	1. Units are already established 2. System has the candidate's information		
Postconditions:	1. The candidate is linked to proper unit		
Normal Flow:	1. Actor click link candidates 2. system prompt jobs list and offer stage candidates 3. Actor choose job and choose candidate 4. Actor click Done 5. System link candidate to the unit 6. System creates the job bands for the candidate 7. System updates file		
Alternative Flows:	3a. In step 3 of the normal flow, if Actor did not choose any job or candidate 1. System prompt Actor to choose what is missing 2. Actor chose Use case resumes on step 4		
Exceptions:	3a. In step 3 of the alternative flow, if actor did not choose anything 1. System discard changes 2. System goes back to previous stage		
Assumptions:			
Notes and Issues:			

Use case ID:	4		
Use Case Name:	LIST CANDIDATES		
Created by:	ALI AL-KHULAIFI	**Last Updated by:**	
Date Created:	30/03/2022	**Last Revision Date:**	
Actors:	Talent Acquisition (TA)		
Description:	View the list of candidates		
Trigger:	Press on view list of candidates		
Preconditions:	The list of candidates is settled		
Postconditions:			
Normal Flow:	1. User press view button 2. The system will load the candidates from file 3. The system will display the names and ids to user to choose 4. The user click on of them to display		
Alternative Flows:			
Exceptions:	In Step 3 of the normal flow, if the user selects both ids and names 1. A message will be displayed to tell the user to choose only one 2. Use case resumes from step 3		
Assumptions:			
Notes and Issues:	The information of the candidate are name, national ID, gender, years of experience and education level.		

Use case ID:	5		
Use Case Name:	MATCH INTERVIEWERS WITH EACH CANDIDATE		
Created by:	Ammar Almajed	**Last Updated by:**	
Date Created:	29/3/2022	**Last Revision Date:**	
Actors:	Talent Acquisition (TA)		
Description:	TA can assign interviewer to various candidates to interview them		
Trigger:	Send interview to candidate		
Preconditions:	1. There is interviewer available to do the interview		
Postconditions:	1. Add the interview to the interviewer schedule 2. Send email to the candidate with the details of the interview 3. Send email to the interviewer with the details of the interview and the candidate		
Normal Flow:	1. TA goes to the website of the company 2. TA enters the password and username 3. TA click the “see candidates list” button 4. TA click the “Send interview to candidate” button 5. TA assign an interviewer to do the interview		
Alternative Flows:	In step 3 if there are no candidates 1. System will display a massage indicating that there are no candidates In step 5 in the normal flow if the interview has conflict with another interview 1. Send a massage indicating that there is a conflict between interviews		
Exceptions:	In step 2 in the normal flow, if the TA enters a wrong password or username 1. Massage to the TA to reenter the password or username 2. TA enters correct password and username 3. Use case resumes on step 3 of normal flow		
Assumptions:			
Notes and Issues:	1. TA has the permission to discuss the interview details with the interviewer 2. TA has the permission to talk with the candidate about the interview details		

Use case ID:	6		
Use Case Name:	VIEW CANDIDATE INFORMATION		
Created by:	Mohammed Alsahli	**Last Updated by:**	
Date Created:	29/03/2022	**Last Revision Date:**	
Actors:	Talent Acquisition, Interviewer		
Description:	View candidate information		
Trigger:	Click at candidate Name/ID		
Preconditions:	Candidate has an active state.		
Postconditions:			
Normal Flow:	1. Actor clicks on candidate's name or ID 2. System loads information from excel sheet 3. System displays the information		
Alternative Flows:			
Exceptions:			
Assumptions:			
Notes and Issues:			

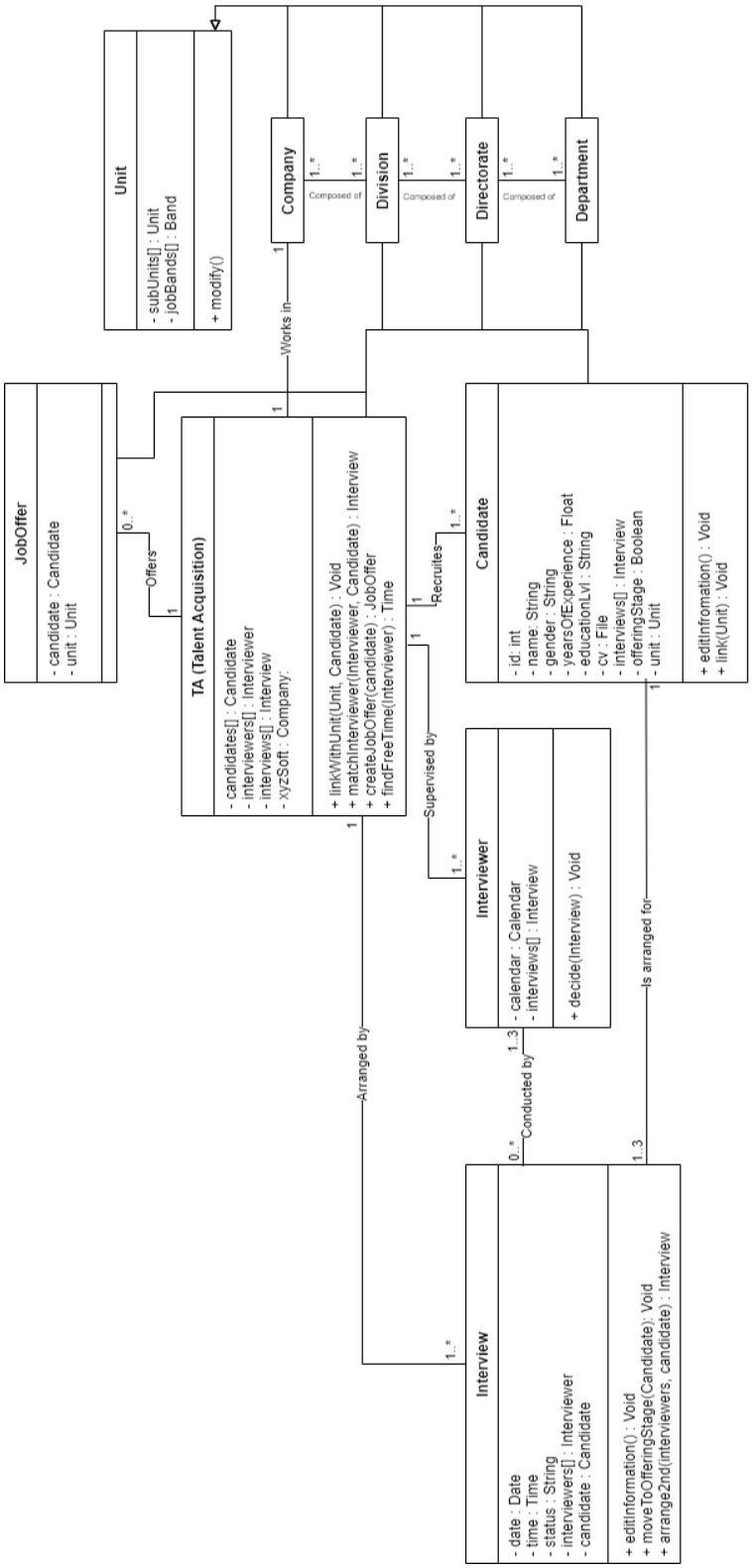
Use case ID:	7		
Use Case Name:	STATE THE CANDIDATE'S STATUS		
Created by:	ALI AL-KHULAIFI	**Last Updated by:**	
Date Created:	31/03/2022	**Last Revision Date:**	
Actors:	Interviewer		
Description:	State the candidate's status		
Trigger:	Press on the status of candidate		
Preconditions:	1. The interview should be done 2. The interviewer should have an access on the system		
Postconditions:	1. The status of the candidate is updated		
Normal Flow:	1. The user select the candidate's information 2. The user press on the candidate's status 3. The screen shown the choices which are pass, fail and hold 4. The user choose one choice 5. The status is updated		
Alternative Flows:			
Exceptions:	In step 4 of the normal flow, if the user chooses more than one option 1. A message is shown telling the user to choose one option 2. The use case will resume in step 3		
Assumptions:			
Notes and Issues:	1. The option hold will change after third Interview		

Use case ID:	8		
Use Case Name:	VIEW INTERVIEW INFORMATION		
Created by:	Ammar Almajed	**Last Updated by:**	
Date Created:	29/3/2022	**Last Revision Date:**	
Actors:	Interviewer		
Description:	Interviewer can view the details of the interview i.e., time, date, interviewee information, etc.		
Trigger:	See interview details		
Preconditions:	1. Interviewer has one or more interviewees to be interviewed		
Postconditions:	1. Interview information does not change 2. Mark interview as seen or reviewed		
Normal Flow:	1. Interviewer goes to the website of the company 2. Interviewer enters the password and username 3. Interviewer selects see interview details from the menu bar 4. System displays all interviews 5. Interviewer selects one of the interviews 6. System displays the information of the details of the selected interview		
Alternative Flows:	In step 4 if there are no interviews 1. System will display a massage indicating that there are no interviews		
Exceptions:	In step 2 in the normal flow, if the interviewer enters a wrong password or username 1. Massage to the interviewer to reenter the password or username 2. Interviewer enters correct password and username 3. Use case resumes on step 3 of normal flow		
Assumptions:			
Notes and Issues:	1. The interviewer does not have permissions to change the details of the interview 2. Interviewer can send emails to interviewee about the interview and some information that they may want to know 3. Interviewer can send emails with interview information to the interviewee as a reminder		

Use case ID:	9		
Use Case Name:	EDIT HIERARCHY		
Created by:	Ali AL-KHULAIFI	**Last Updated by:**	
Date Created:	4/11/2022	**Last Revision Date:**	
Actors:	Talent Acquisition		
Description:	Edit the hierarchy of the company		
Trigger:	Click on Edit hierarchy button		
Preconditions:	1. The unit is edited should be existed. 2. The unit will be added should not be existed.		
Postconditions:	1. The hierarchy is updated		
Normal Flow:	1. Edit hierarchy: 1. click on Edit hierarchy button 2. The units of company is shown 3. click on the unit want to be edited 4. change the job bands of the unit 5. The job bands is updated 2. Add new Unit: 1. click on Edit hierarchy button 2. The units of company is shown 3. click on add new unit button 4. add the name of the unit 5. click on the unit that is the parent of the new unit 6. the unit is added		
Alternative Flows:			
Exceptions	In normal flow 2.4, if the new unit is existed: 1. Show an error message telling the user that the unit is already existed 2. Use case resumes on 2.3 In normal flow 1.3, if the unit to be edited is empty: 1. Show an error message telling the user that the unit is empty. 2. Use case resumes on 2.2		
Assumptions:			
Notes and Issues:			

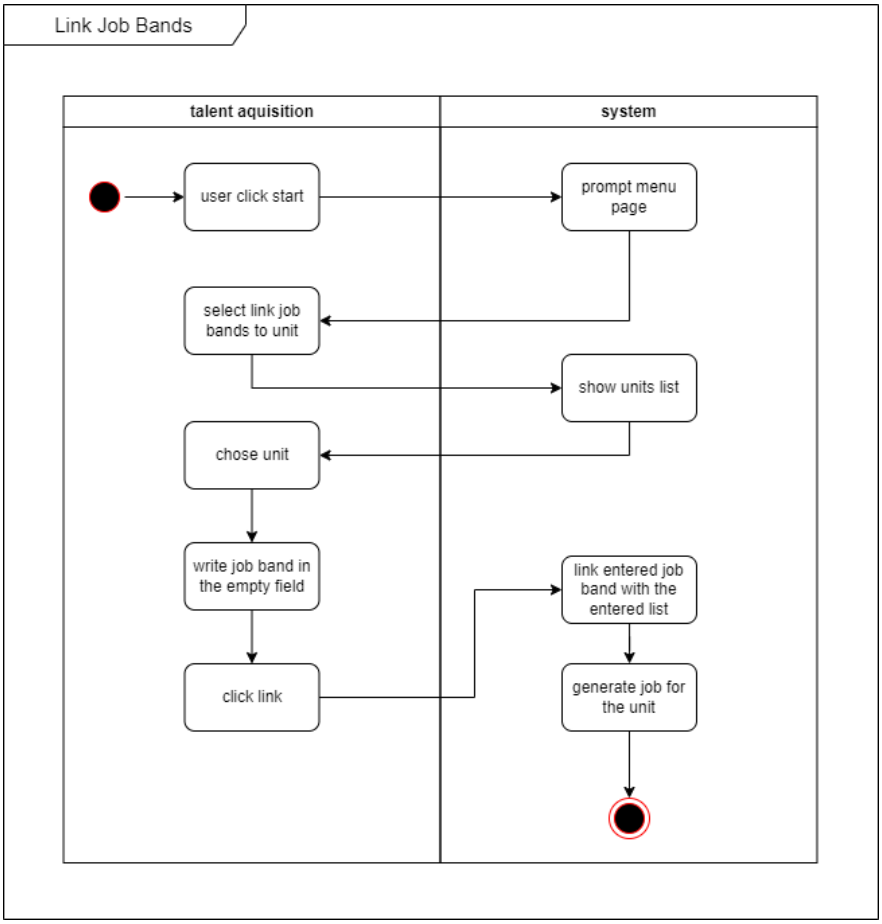
PHASE 2

CLASS DIAGRAM

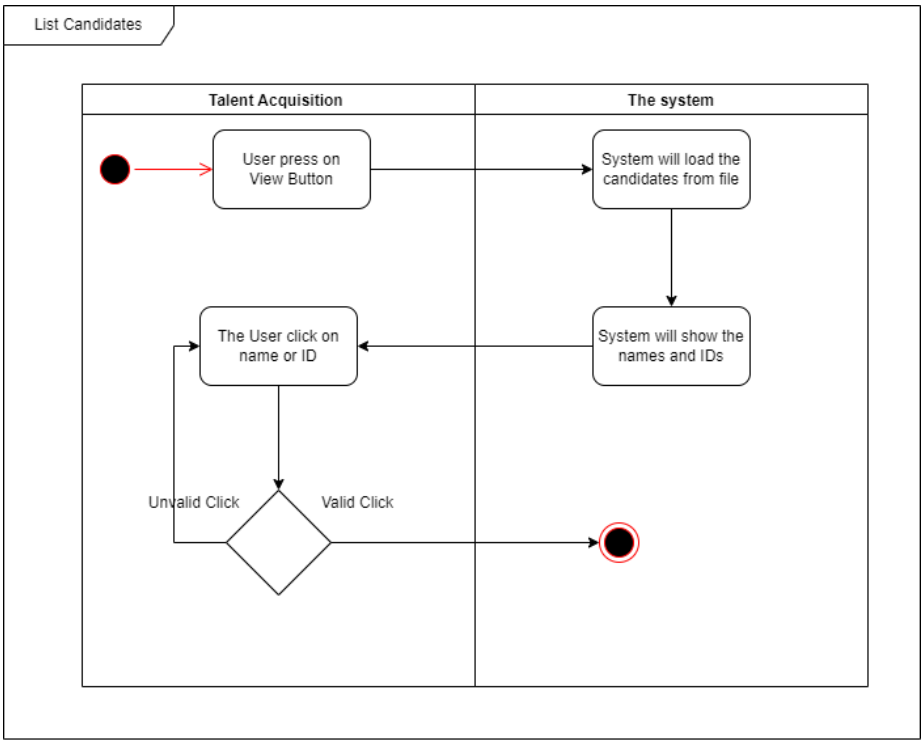


ACTIVITY DIAGRAM

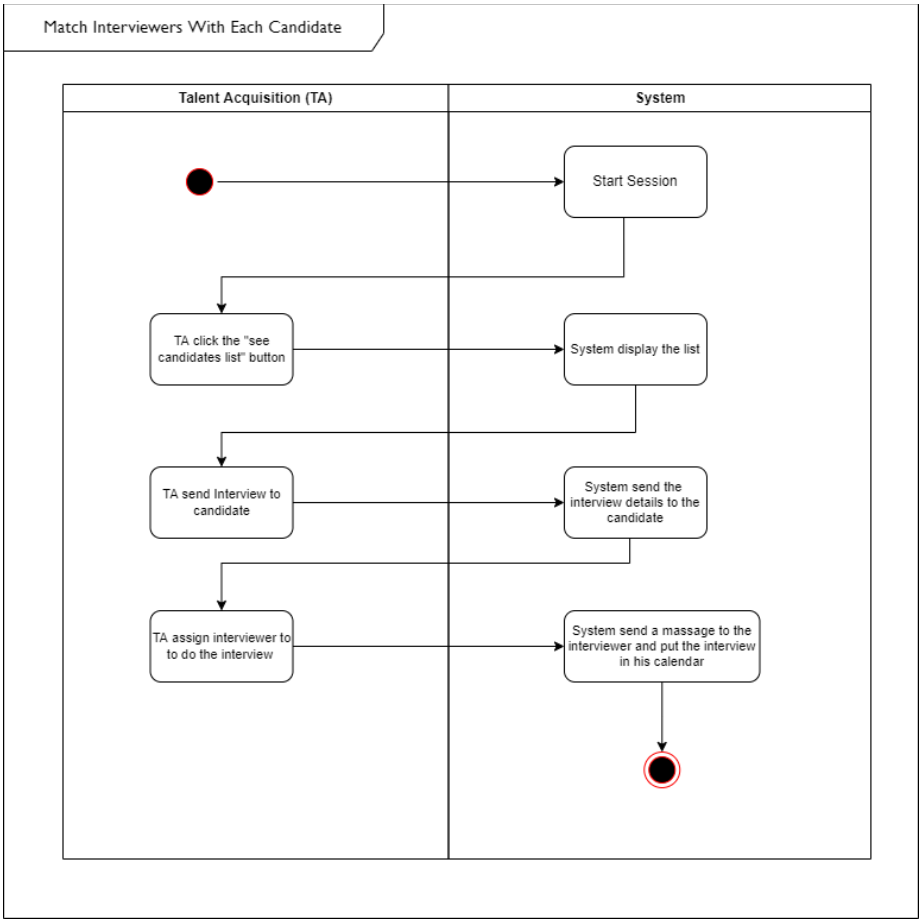
LINK JOB BANDS



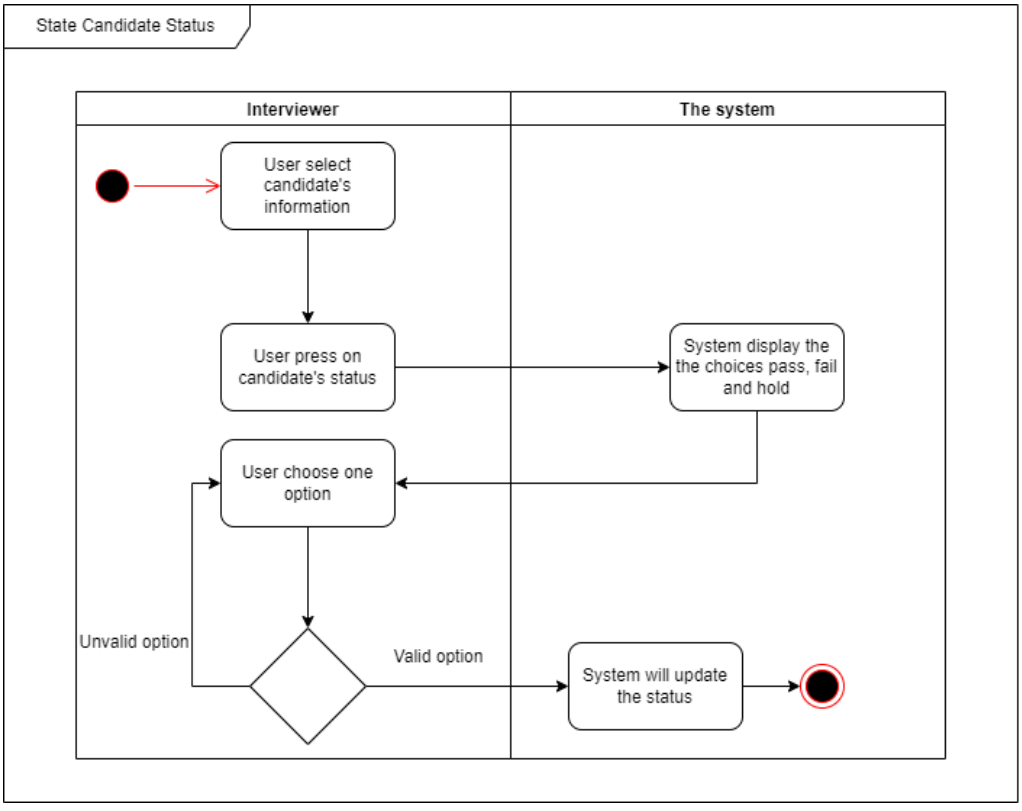
LIST CANDIDATES



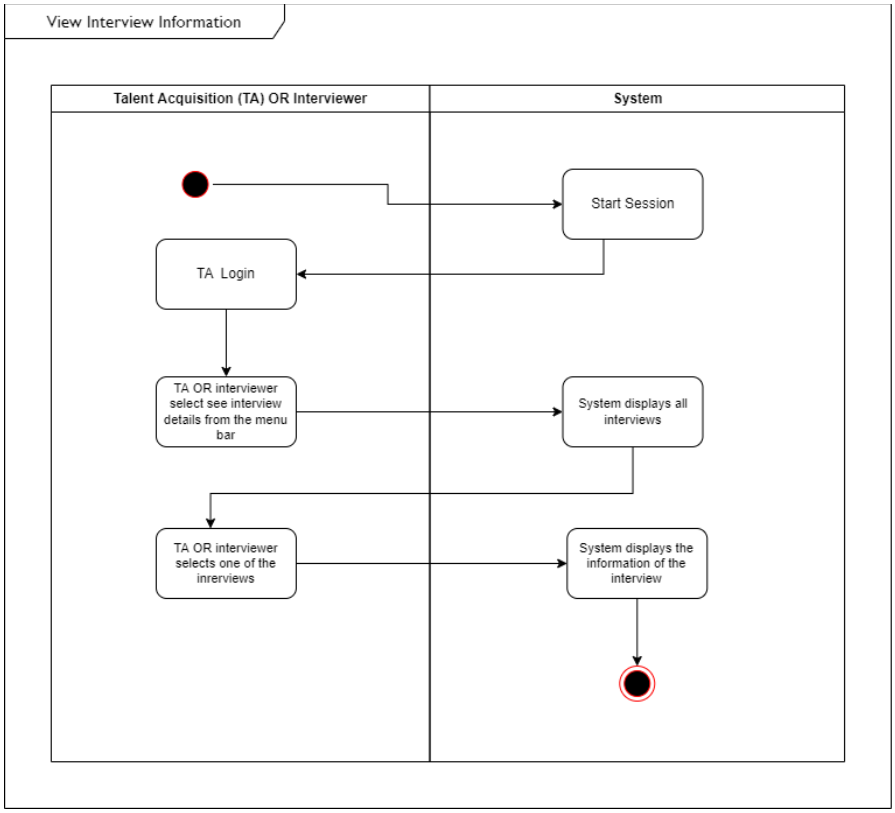
MATCH INTERVIEWERS WITH EACH CANDIDATE



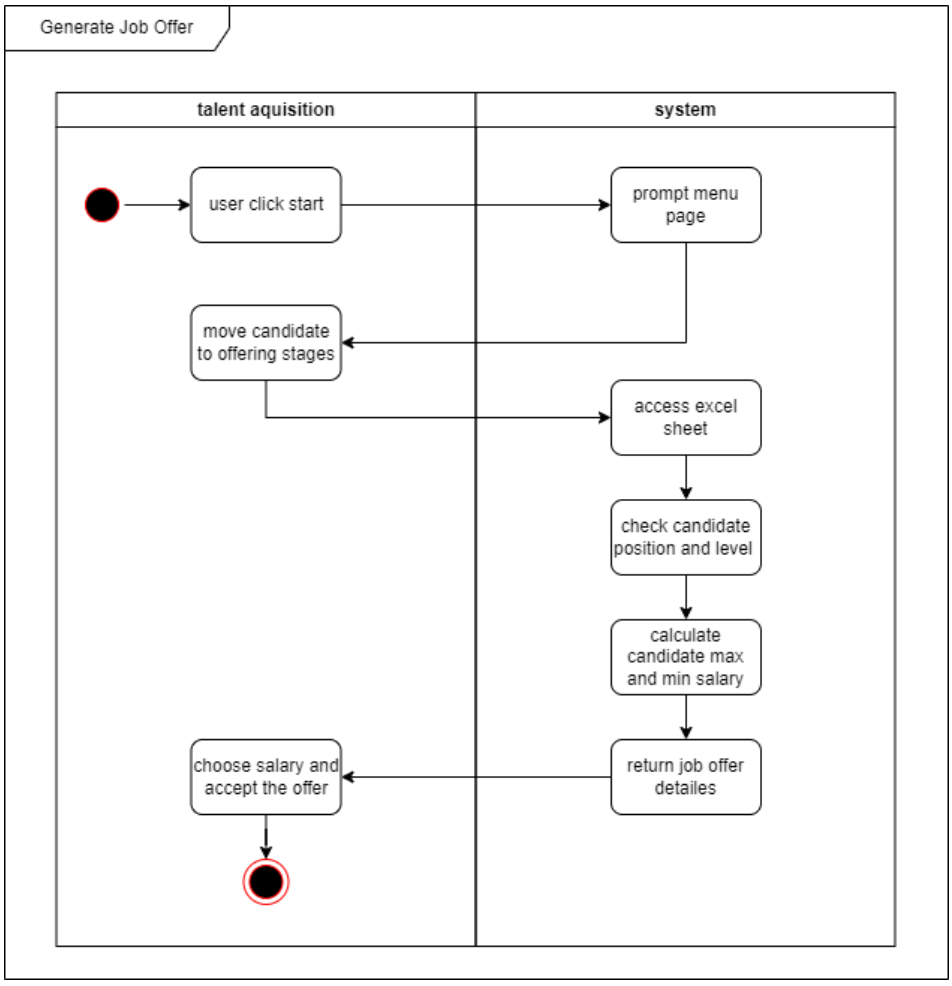
STATE THE CANDIDATE'S STATUS



View Interview Information

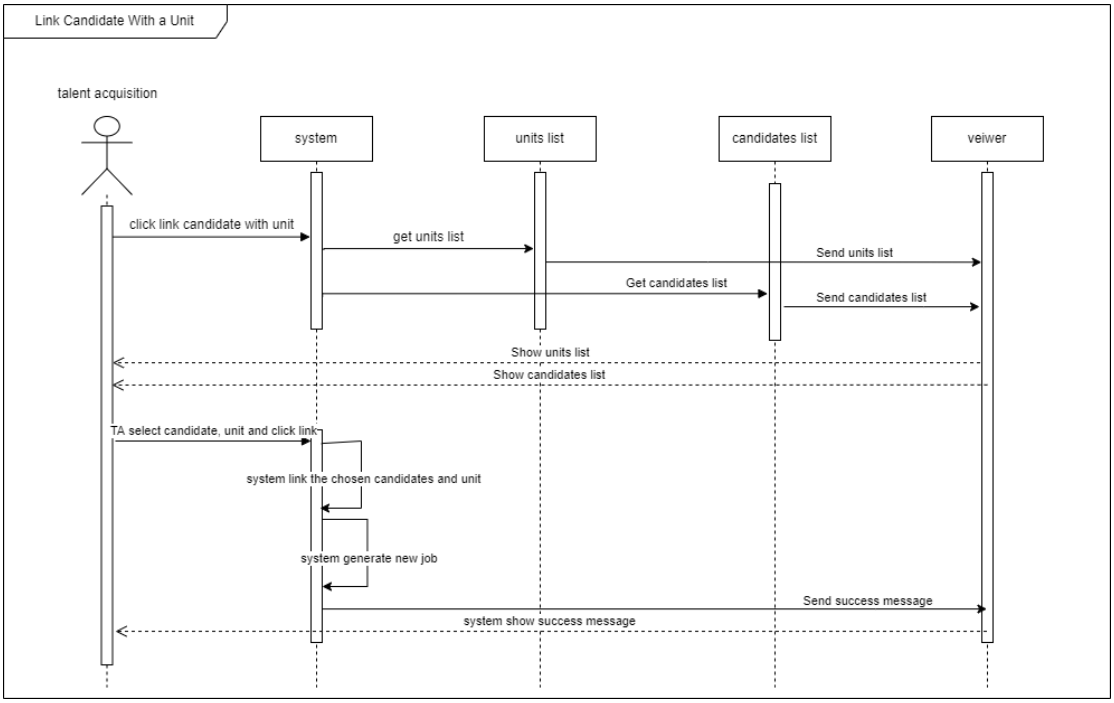


Generate Job Offer

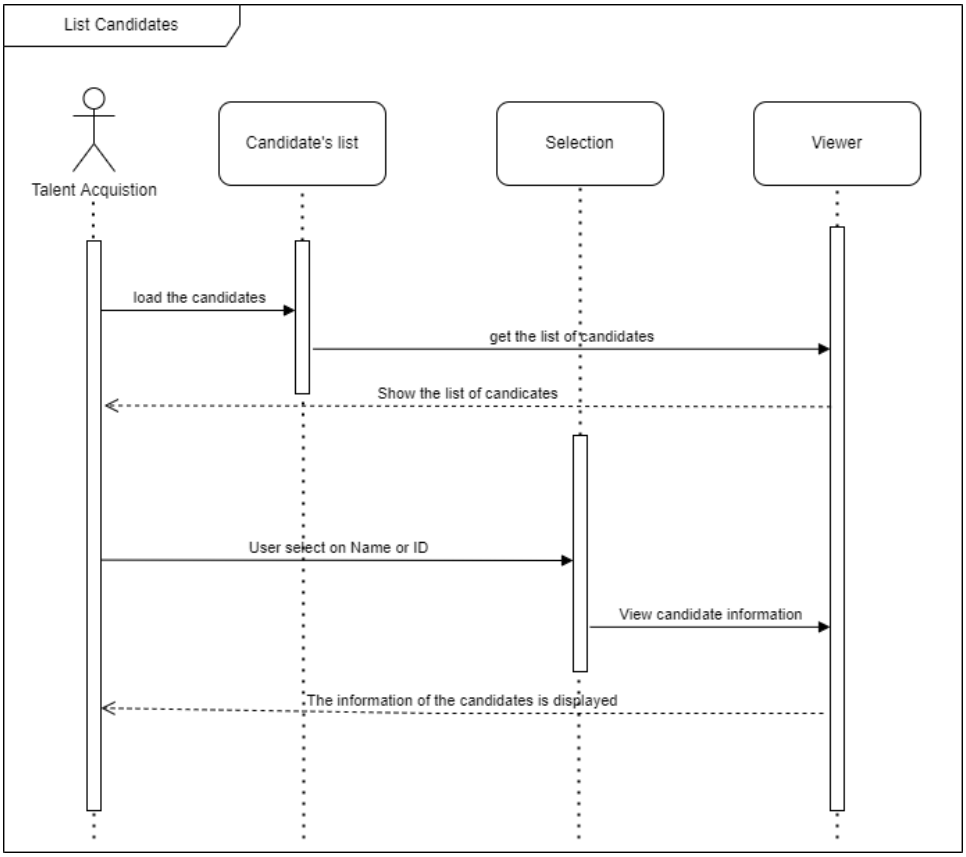


SEQUENCE DIAGRAM

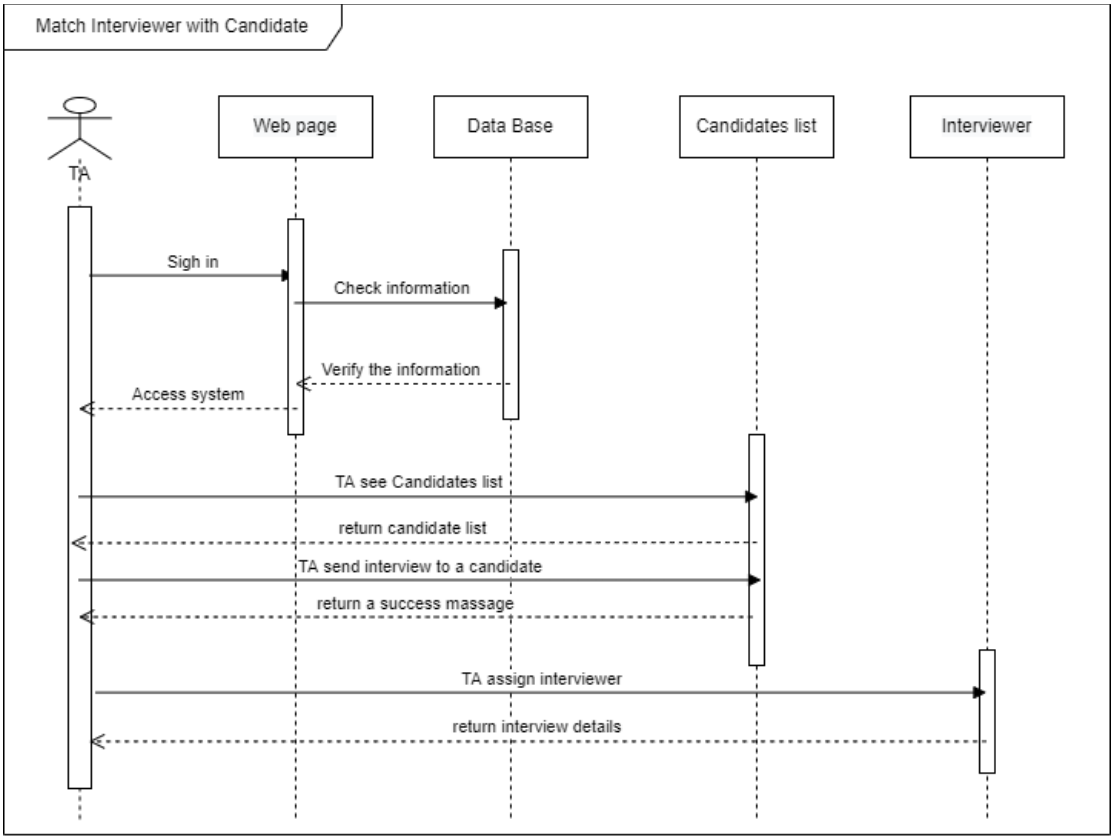
LINK CANDIDATE WITH A UNIT



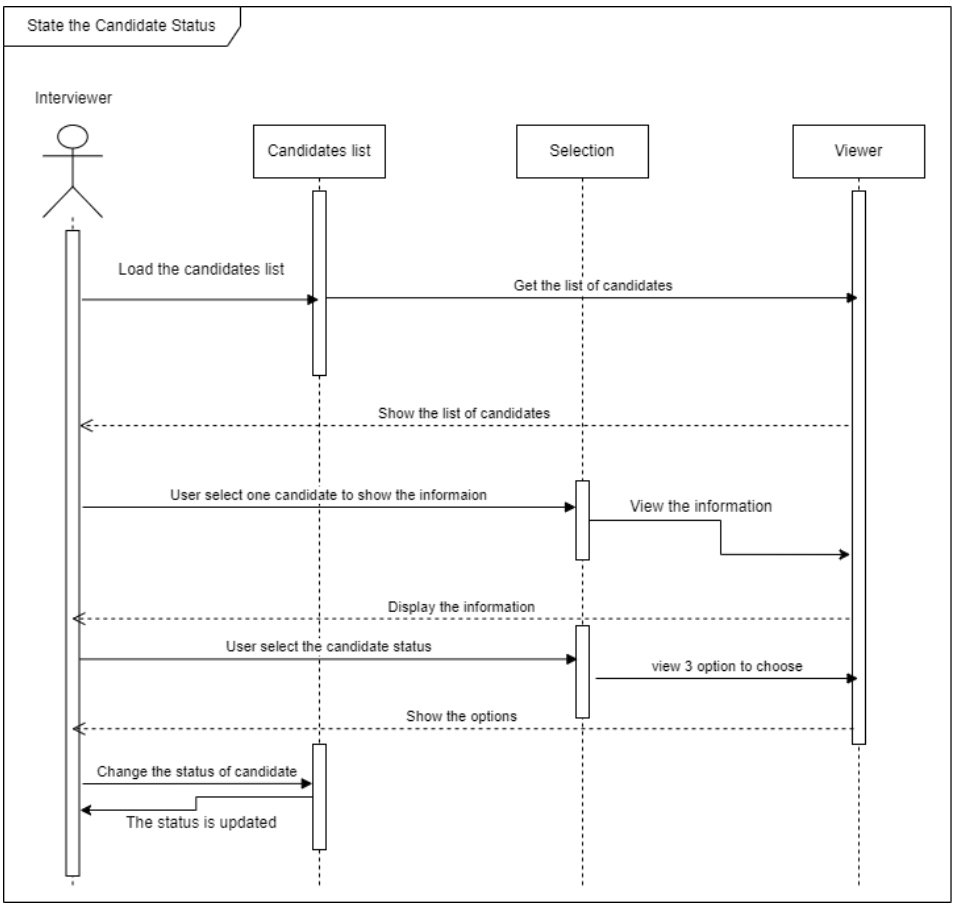
LIST CANDIDATES



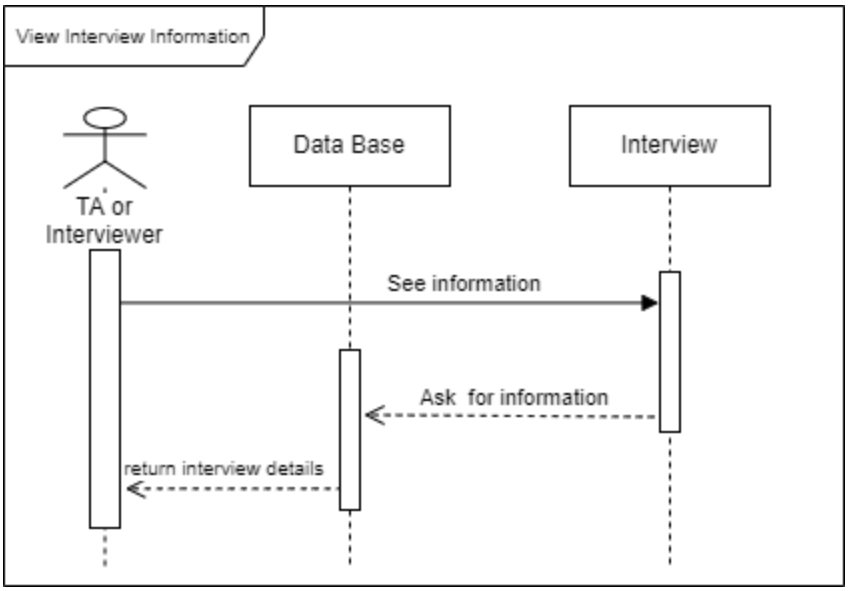
MATCH INTERVIEWERS WITH EACH CANDIDATE



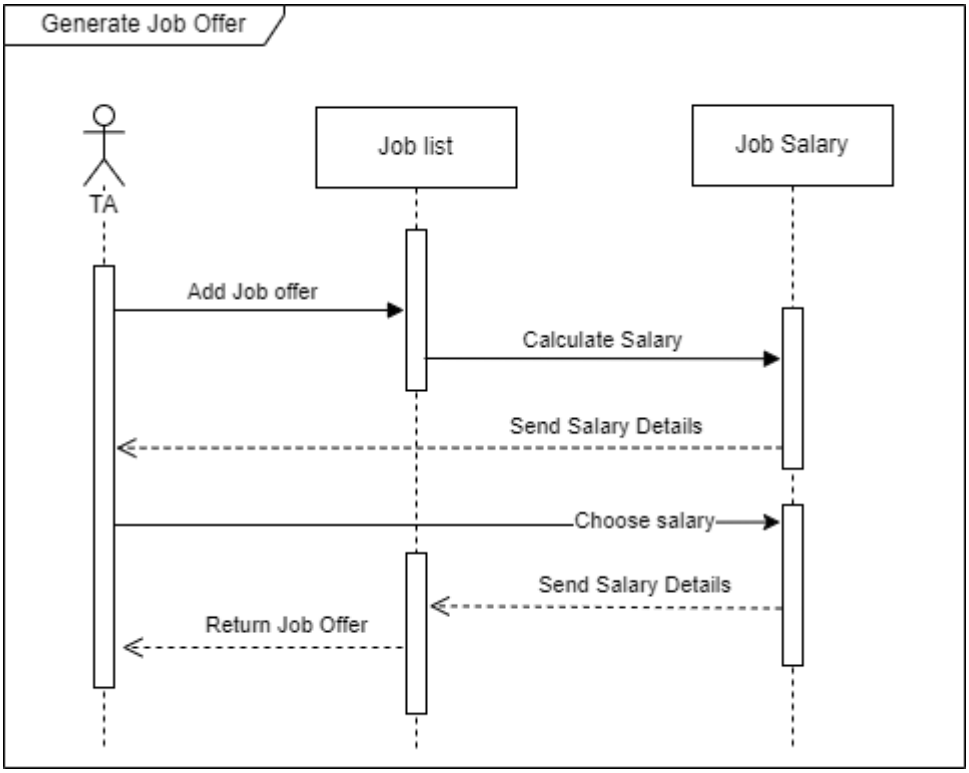
STATE THE CANDIDATE'S STATUS



VIEW INTERVIEW INFORMATION



GENERATE JOB OFFER



PHASE III

At this stage we created 8 scenes for each class:

A – Interviews

B – Calendar

C – Interviewer

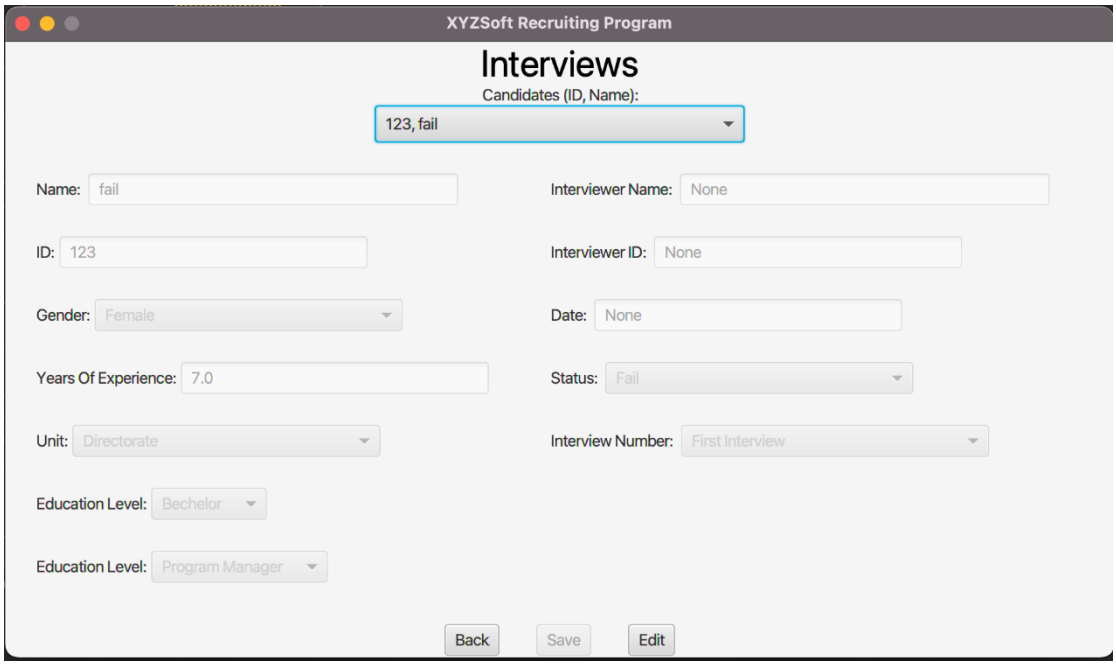
D – Job Offering

E – Hierarchy

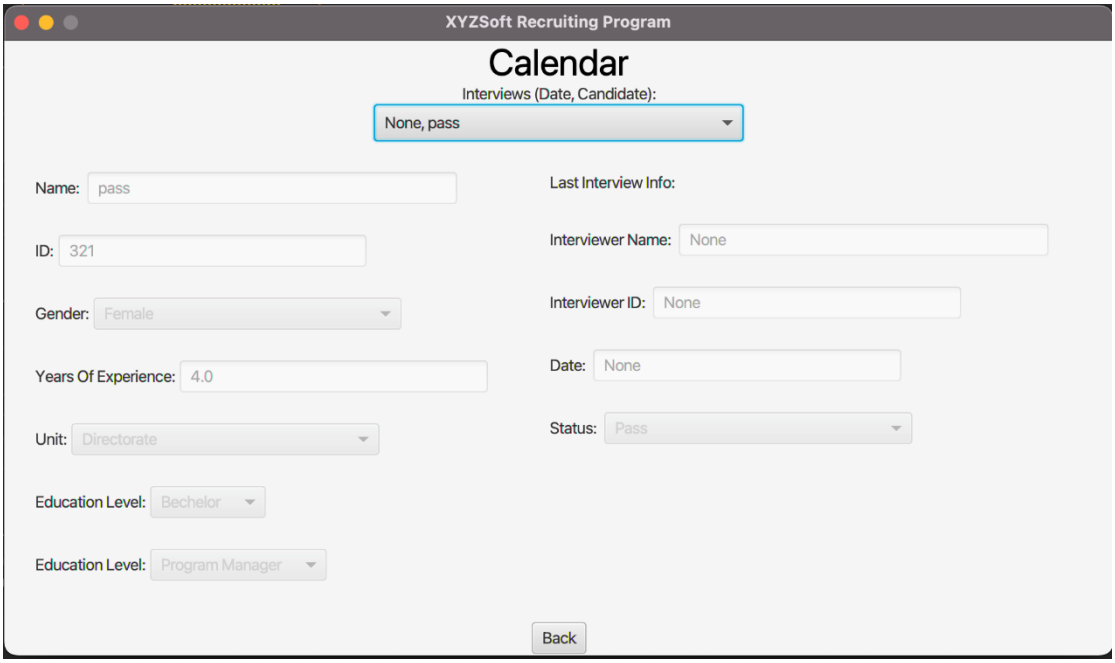
F – Candidate

G – XYZ Recruiting Program

H – Talent Acquisition



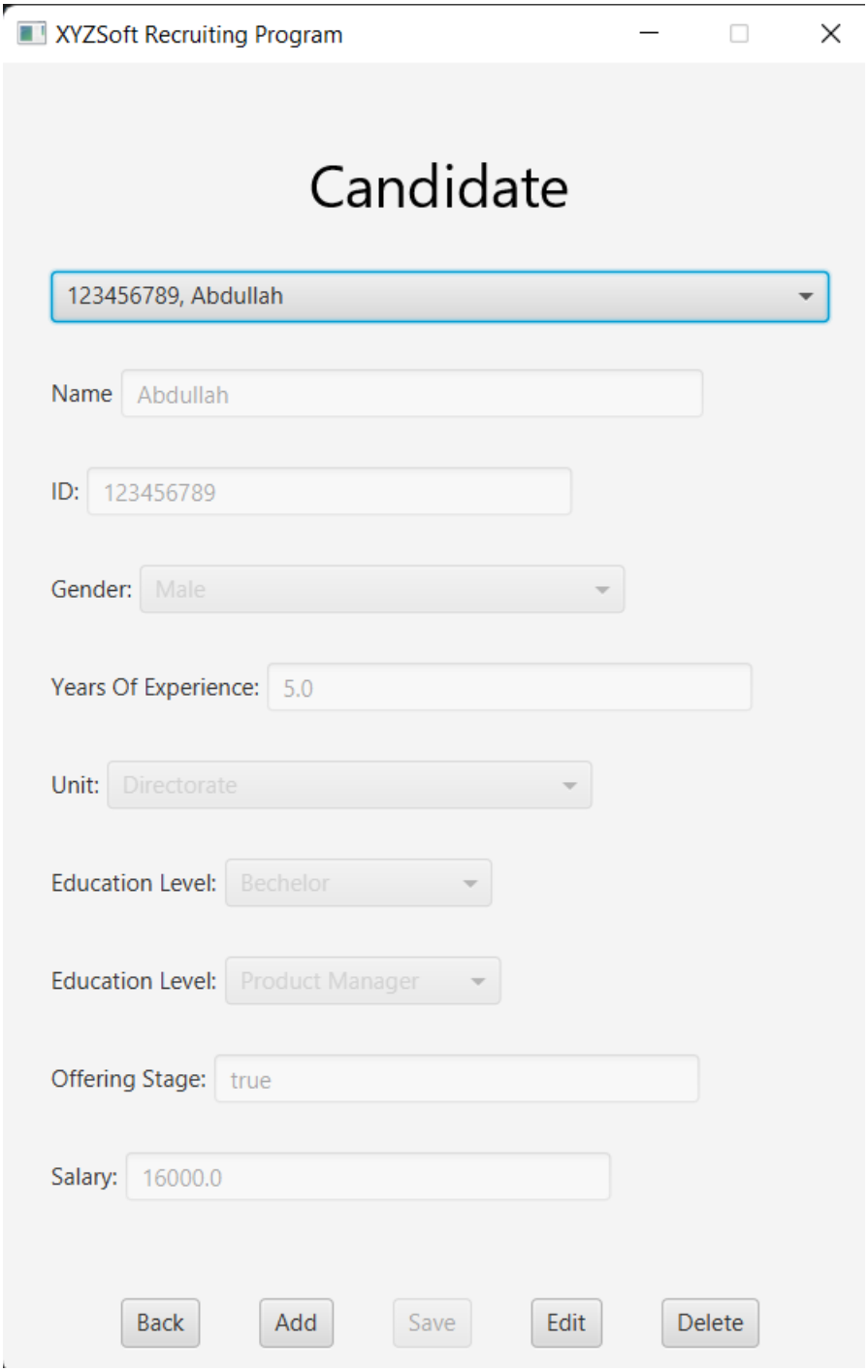
In this Scene it shows the details of the interview. It shows the details of the candidate and the details of the Interviewer.



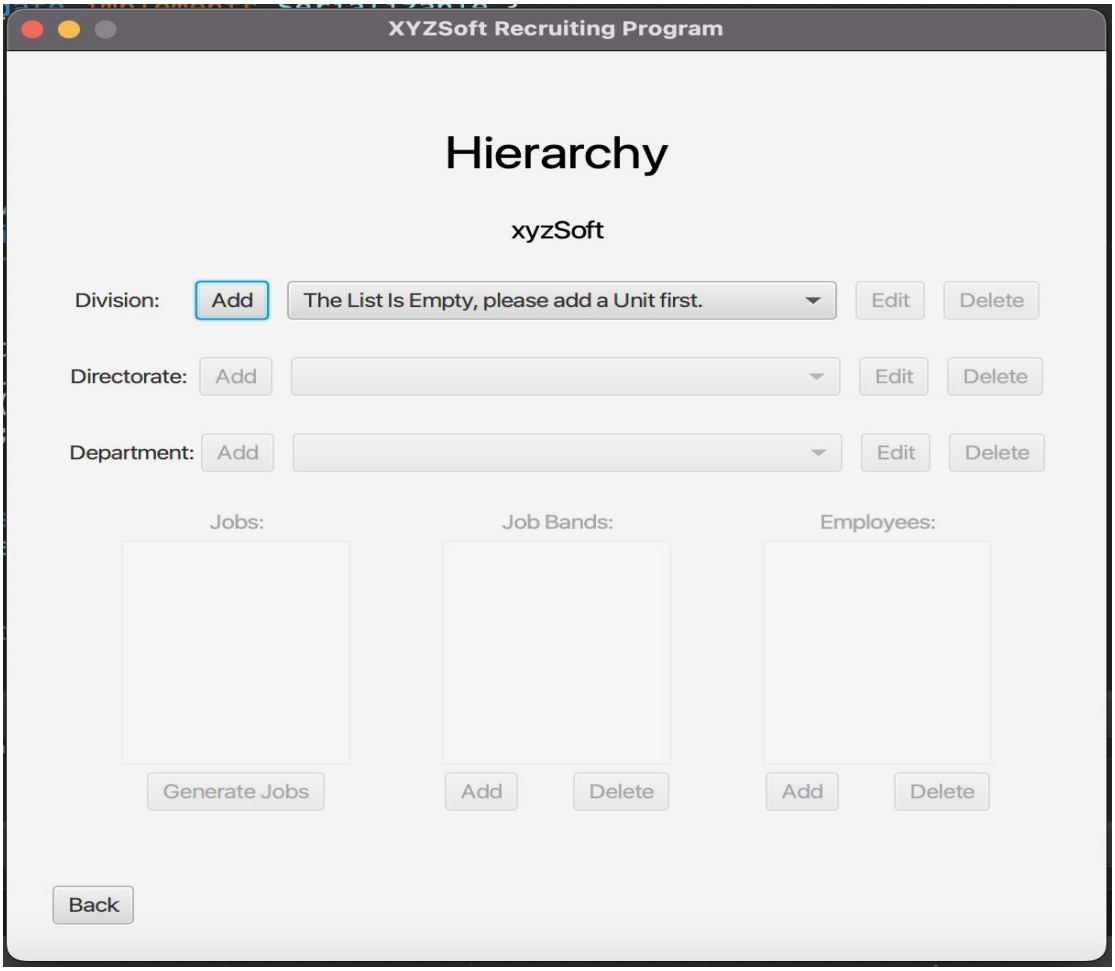
In this Scene, it shows the details of the candidate and the interviewer to set a new Date for the interview.

In this scene, it is job offering page. It allows the user to choose the salary of the offer. We use the formulas in the excel sheet to get the salary

In this Scene, It shows the point of view of an Interviewer actor. He has to choose between the calendar and the Interviews.



In this scene, it shows the details of the candidate and his status and it allow the user to change his information.



In this Scene, it shows the hierarchy of the company. Also, it allows the user set the division, directorate and department. Also, it allows the user to generate jobs and job bands and add employees who has already been offered a job.

In this Scene, it shows the point of view of the TA actor to choose between these scenes Candidates, Hierarchy and Job Offers.

In this Scene, it shows the main page of the program. It allows the user to choose between the two actors TA and Interviewer.