

# SWE316 Project phase 1

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#### This document contains:

- Use case description
- Use case diagrams
- Sequence diagrams
- Class and package diagrams
- State diagrams
- Deployment architecture

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# 1 Candidate Account Registration Use Cases

# 1.1 [UC 01 -02-01] - [Create Account for Saudi/Muqeem]

#### **Actors**

The Actor of this use case will be a public user (candidate).

#### **Description**

The main objective of this use case is to create an account for Saudi/Muqeem candidate on the registration system. Each registered candidate has a profile with all candidates' details such as registered exams and grades.

#### Trigger

From the Registration system (public site) home page, the actor selects to create new account.

#### **Preconditions**

- 1. The actor should be on the registration system home page.
- 2. The actor shouldn't be registered before.

- 01.1 The actor selects to create new account.
- O1.2 The system directs the user to create new account page and prompts him/her to fill the create account first step "Registration Instructions" information; which are the following:
  - Candidate Type [BR 01.1]
  - I Agree on the Registration Instructions [BR 01.2]
- 01.3 The actor fills the first step of account registration information which are the following:
  - Candidate Type.[A 01.1]
  - I agree on the registration instructions. [A 01.2]
- 01.4 The actor selects to move to the next step of account registration; which is "Basic Info".
- 01.5 The system validates the first step of account registration.
- O1.6 The system moves the candidate to the second step of the registration and prompts the candidate to fill the second step information which are the following:
  - National ID number/Igama Number. [BR 01.3] [BR 01.4]
  - First Name.
  - Father Name.
  - Grandfather Name.
  - Family Name.
  - Date Of Birth [BR 01.5]
  - Gender.

- O1.7 The actor fills the second step of account Registration "Basic Info" information; which are the following:
  - National ID number/Iqama Number. [A 01.11] [A 01.12]
  - First Name.
  - Father Name.
  - Grandfather Name.
  - Family Name.
  - Date of Birth.
- 01.8 The actor selects to check his/her info with AL-Elm. [UC 01-02-02] [Check Candidate Info with Al Elm].
- O1.9 The system displays a pop-up screen with the following confirmation message to the candidate "Are you sure that your information is valid?" and displays the candidate information which are the following: [A 01.3] BR 01.6]
  - National ID number / Igama Number.
  - Full Name.
  - Date of Birth.
- 01.10 The actor confirms on his/her information. [A 01.4]
- 01.11 The system checks the candidate information with AL-Elm. [UC 01-02-02] [Check Candidate Info with Al Elm].
- 01.12 The system displays the following message to the user "your information has been checked".
- 01.13 The system checked the candidate full name. [BR 01.28]
- 01.14 The system moves the user to the third step of account registration "Profile information" and prompts the user to fill the profile information; which are the following: [A 01.5] [A 01.10]
  - Basic Information:
    - National ID number/Igama Number. [BR 01.7] [BR 01.8]
    - First Name. [BR 01.24]
    - Father Name. [BR 01.24]
    - Grandfather Name. [BR 01.24]
    - Family Name. [BR 01.24]
    - Date of Birth. [BR 01.9]
    - Gender. [BR 01.21]
    - I have National ID. [BR 01.27]
    - I have Qiyas Smart Card. [BR 01.27]
    - Submission date. [BR 01.10]
  - Contact information:
    - Mobile Number. [BR 01.11]
    - Other Mobile Number. [BR 01.11]
    - Email Address. [BR 01.12]
  - Profile information:
    - Account Type.
    - Account Type Level one. [BR 01.13]
    - Account Type Level two. [BR 01.14]
    - Account Type Level Three. [BR 01.15]
    - Region.

- City. [BR 01.16]
- School Name. [BR 01.17]
- Password. [BR 01.18]
- Confirm Password. [BR 01.19]
- Secret Question.
- Secret Question's Answer.
- Personal Photo. [BR 01.20]
- Personal Certificate.
- Fingerprint Photo. [BR 01.22]
- Finger print template. [BR 01.23]

#### 01.15 The actor fills the third step of account registration; which are the following:

#### **Basic Information:**

- National Number.
- First Name.
- Father Name.
- Grandfather Name.
- Family Name.
- Date of Birth.
- Gender
- I have National ID. [A 01.16]
- I have Qiyas Smart Card.
- Submission date.

#### - Contact information:

- Mobile Number
- Other Mobile Number
- Email Address. [A 01.6]

#### Profile information:

- Account Type.
- Account Type Level one.
- Account Type Level two.
- Account Type Level Three.
- Region.
- City.
- School Name.
- Password. [A 01.13] [A 01.14]
- Confirm Password. [A 01.15]
- Secret Question.
- Secret Question's Answer.
- Personal Photo.
- Personal Certificate.
- Fingerprint Photo.
- Finger print template.
- 01.16 The actor selects to create his/her account. [A 01.8]
- 01.17 The system validates the account information.
- 01.18 The system displays the following confirmation message to the use "Are you sure you want to create your account?" [A 01.7]

- 01.19 The actor confirms creating account. [A 01.9]
- 01.20 The system displays the following message to the user "Thank you for creating account, your registration number will be sent to your E-mail/mobile. You can use the registration number and your password to login the registration system"
- 01.21 The system creates the candidate account.
- 01.22 The system generates an application number for the candidate request. [BR 01.25]
- 01.23 The system generates Registration Number for the candidate. [BR 01.26]
- 01.24 The system notifies the candidate with the Registration number on his mobile and email address.
- 01.25 The system sets the status of the account application as "Approved".
- 01.26 The system directs the user to the Registration system login page.

- O1.1 In case the candidate type is empty, the system should display the following error message "Candidate Type should be specified".
- O1.2 In case the "I Agree on the Registration Instructions" is not checked, the system should disable moving the candidate to the next step of account registration.
- 01.3 In case not all mandatory fields are filled, the system should display the following error message "Please fill all mandatory fields" and mark the mandatory fields with red strikes.
- 01.4 In case the actor doesn't confirm his information, the system should direct the user to the second step of account registration with no actions.
- O1.5 In case the actor exceed all attempts to check with Al-elm with false result, the system displays the following message to the user "You have exceed all your attempts with Alelm, Please fill your contact information and we will call you soon" and prompts him/her to fill the contact information; which are the following:
  - Mobile Number. [BR 01.11]
  - Email Address. [BR 01.12]
  - Personal Certificate.
  - 01.5.1 The actor fills the contact information; which are the following:
    - Mobile Number.
    - Email Address. [A 01.6]
    - Personal Certificate.
  - 01.5.2 The actor selects to submit his/her contact information.
  - 01.5.3 The system sends the account request to the RRadmin.
  - O1.5.4 The system sets the status of the account as "Sent to RRadmin"
  - 01.5.5 The system generates an application number for the candidate request. [BR 01.25]
  - 01.5.6 The system directs the user to the Registration system login page.
- 01.6 In case the email address is not in the correct format of email address, the system should displays the following error message "Invalid email address"
- 01.7 In case not all mandatory fields are filled, the system should displays the following error message to the user "Please fill all mandatory fields" and marks the mandatory fields with red asterisks.
- O1.8 In case the actor cancels the operation, the system should direct the user to the Registration system login page with no actions.

- 01.9 In case the actor cancels the confirmation message, the system should direct the user to the step three of the account registration with no actions.
- 01.10 In case the retrieved full name from Al-Elm doesn't match the entered name by the candidate, the system should display the following error message to the user "Names are not matched, Please fill your contact information and we will call you soon" and prompts him to fill the contact information; which are the following:
  - Mobile Number. [BR 01.11]
  - Email Address. [BR 01.12]
  - Personal Certificate.
  - 01.10.1 The actor fills the contact information; which are the following:
    - Mobile Number.
    - Email Address. [A 01.6]
    - Personal Certificate.
  - 01.10.2 The actor selects to submit his/her contact information.
  - 01.10.3 The system sends the account request to the RRadmin.
  - 01.10.4 The system sets the status of the account as "Sent to RRadmin"
  - 01.10.5 The system generates an application number for the candidate request. [BR 01.25]
  - 01.10.6 The system directs the user to the Registration system login page.
- 01.11 In case there is an account with status "Approved" for the same entered national ID, the system should display the following error message to the user "There is already account for the entered national ID"
- 01.12 In case there is account request with status "Sent to RRadmin" for the same entered national Id, the system should display the following error message to the user "The account if already exist" and the system should display a link to the candidate to direct him/her to the Registration system login page.
- 01.13 In case the password is not between 6-20 characters or not combined form letters and numbers, the system should display the following error message "Password length should be between 6-20 and it should be combinations from letters and numbers".
- 01.14 In case the password is null, the system should display the following error message "Please enter the password".
- 01.15 In case the "Confirm password" is not match the password, the system should display the following error message "Password and confirm password should be matched"
- 01.16 In case "I have national ID" is selected, the system should prompts the user to fill following filed:
  - "رقم الحفظ" -

#### **Business Rules**

- O1.1 Candidate Type should be "Saudi/Muqeem". And the system should retrieve the Registration Instructions for Saudi/Muqeem candidates.
- O1.2 The actor should check the "I Agree on the Registration Instructions" to enable him/her to the next step of account registration.
- 01.3 National ID Number/Iqama Number should be 10 digits and each digit should be in separate text box.
- 01.4 National ID shouldn't be registered before.

- 01.5 The actor should have the option to fill the Date of birth in hijiry or Gregorian.
- 01.6 Candidate information should be displayed as read only.
- O1.7 National ID should be retrieved as read only as entered in the second step in account registration.
- 01.8 Each digit in the national ID should be filled in a separate textbox.
- O1.9 Date of birth should be read only and it should be retrieved as entered in the second step of account registration.
- 01.10 Submission date should retrieve the current Hijry date [Read only].
- 01.11 Mobile Number should be in a correct format of mobile Number and it should be in two textboxes with the following format. [+ "Country Code"] ["Mobile Number"].
- 01.12 Email Address should be in a correct format of email address [Email Name @hostname.xxx]
- 01.13 The system should filter the "account type level 1" based on the selected "Account Type"
- 01.14 The system should filter the "Account type level2" based in the selected "Account type level1".
- 01.15 The system should filter the "Account type level3" based on the selected "Account type level2".
- 01.16 The system should filter "City" based on the selected Region.
- 01.17 "Schools" should be filtered based on the selected city.
- 01.18 "Password" should be between 6-20 character and it should be a combination of letters and numbers.
- 01.19 "Confirm Password" should match the "Password".
- 01.20 "Personal Photo" is required just in case the candidate gender is "Male".
- 01.21 Gender should be retrieved as read only as entered in the second step of account registration.
- 01.22 Finger print photo should be empty and it shouldn't be entered by the user. Finger print photo will be uploaded to the candidate through the finger print device. [See finger print device requirements]
- 01.23 Finger print template should be empty and it shouldn't be appeared to the user. It should be a record in the data base only. [See finger print device requirements.]
- 01.24 Full name of the candidate (first, father, grandfather and family name) should be retrieved as read only as entered in the second step of account registration.
- 01.25 Application number format should be as the following:

YY-MM-XXXX

Where:

YY: Current Hijiry Year.

MM: Current Hijiry Year.

XXXX: sequential number starting from 0001.

- 01.26 Registration number format should be as the following:
  - YY Random Number where:
    - YY: hijiry year (32, 33,34)
    - 8 Random Numbers and they should be unique.
- 01.27 This filed should be appeared only if the candidate gender is female.
- 01.28 The system should check the entered candidate full name with the received candidate name from AL-Elm taking into considerations the following criteria of ignoring alef hamza, and other special letters as provided in the below table:

Arabic Letter	Considered as	Example
1111	1	considered asأحمد، احمد، إحمد احمد
م ق	4	هبه، هبة considered as هبه
۶	Ignored	نجلاء considered as نجلا
ي ی	ي	سهي considered as سهی
j	9	مؤید considered as موید

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - Registration Number should be sent to the candidate by email and SMS.
  - Account Registration application status should be approved.
  - The actor should have the option to take one of the following actions:
    - Candidate Login [Login use case reference]

# 1.2 [UC 01 -02-02] - [Check Candidate Info with AL-Elm]

#### Actors

The Actor of this use case is Al-Elm (web service).

#### **Description**

The main objective of this use case is to check the candidate's information with AL Elm through YESSER or directly.

#### Trigger

From the second step of Saudi/Muqeem account registration page, the actor selects to check his/her information with Al-elm

#### **Pre-Conditions**

1. The actor should be in the second step of account registration.

[UC 01 -02-01] - [Create Account for Saudi/Muqeem]

- 02.1 The actor selects to check his/her information with Al-Elm. [BR 02.1]
- O2.2 The system sends the candidate's information to be verified with Al-Elm through web services. The candidate information are the following:
  - National ID/ Igama Number.
  - Year of Birth.
- 02.3 Al-Elm verifies the candidate information. [BR 02.2]
- O2.4 Al-Elm sends the candidate information for the submitted national ID which are the following: [A 02.1]
  - National ID.
  - Full Name.
  - Date of Birth.
  - Gender.
- 02.5 The system receives the candidate information from Al-Elm through the web service.

- O2.1 In case the National ID and the Year of birth are not matched at Al-elm, the system should display the following error message to the user "Invalid information".
  - 02.1.1 The system directs the user to the second step of account information.
  - 02.1.2 The system prompts the user to fill his/her basic information. [UC 01 -02-01] [Create Account for Saudi/Muqeem] Normal Flow 01.6

#### **Business Rules**

- O2.1 The candidate has fixed number of the attempts to check his/her information with Al-Elm. [system parameter]
- O2.2 The system should check the record of the candidate with Al-Elm through a web service by sending the national ID with the year of birth as entered by the candidate to be checked if they are matched with the candidate information at Al-Elm.

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - o Candidate information should be checked with Al-Elm Successfully.

# 1.3 [UC 01 -02-03] - [Create Account for Non Saudi/Non Muqeem Auto Approval]

#### Actors

The Actor of this use case will be a public user "Non Saudi/Non Muqeem Candidate".

#### **Description**

The main objective of this use case is to create an account for Non Saudi candidate on the registration system. Each registered candidate has a profile with all candidates' details such as registered exams and grades.

#### Trigger

From the Registration system (public site) home page, the actor selects to create new account.

#### **Pre-conditions**

- 1. The actor should be on the registration system Login page.
- 2. The actor shouldn't be registered before.
- 3. "Auto Approval account requests for Non Saudi" should be checked.

- 03.1 The actor selects to create new account.
- 03.2 The system directs the user to Create Candidate Account page and prompts him/her to fill the create account first step "Registration Instructions" information; which are the following:
  - Candidate Type [BR 03.1]
  - I Agree on the Registration Instructions [BR 03.2]
- 03.3 The actor fills the first step of account registration information which are the following:
  - Candidate Type.[A 03.1]
  - I agree on the registration instructions. [A 03.2]
- O3.4 The actor selects to move to the next step of account registration; which is "Profile Information".
- 03.5 The system validates the first step of account registration.
- O3.6 The system moves the candidate to the second step of account registration which is "profile Info" and prompts him to fill his/her basic information; which are the following:
  - Basic Information:
    - Country.
    - National Number. [BR 03.3] [BR 03.4] [BR 03.5] [BR 03.23]
    - First Name.
    - Father Name.
    - Grandfather Name.
    - Family Name.
    - Date of Birth. [BR 03.6]
    - Gender.
    - Submission date. [BR 03.7]
  - Contact information:
    - Mobile Number. [BR 03.8]
    - Other Mobile Number. [BR 03.8]
    - Email Address. [BR 03.9]
  - Profile information:
    - Account Type.

- Account Type Level one. [BR 03.10]
- Account Type Level two. [BR 03.11]
- Account Type Level Three. [BR 03.12]
- Region.
- City. [BR 03.13]
- School Name. [BR 03.14]
- Password. [BR 03.15]
- Confirm Password. [BR 03.16]
- Secret Question.
- Secret Question's Answer.
- Personal Photo. [UC 01-02-04]-[Upload Personal Photo by Non-Saudi Candidate] [BR 03.17]
- Personal Certificate. [UC 01 -02-08] [Upload Personal Certificate for Non Saudi Non Muqeem Candidate]
- Fingerprint Photo. [BR 03.21]
- Finger print template. [BR 03.22]
- O3.7 The actor fills the second step of account registration information; which are the following: [BR 03.18]
  - Personal Information:
    - Country.
    - National Number. [A 03.7] [A 03.8]
    - First Name.
    - Father Name.
    - Grandfather Name.
    - Family Name.
    - Date of Birth.
    - Gender.
    - Submission date.
  - Contact information:
    - Mobile Number.
    - Other Mobile Number.
    - Email Address. [A 03.3]
  - Profile information:
    - Account Type.
    - Account Type Level one
    - Account Type Level two.
    - Account Type Level Three.
    - Region.
    - City.
    - School Name.
    - Password. [A 03.4] [A 03.5]
    - Confirm Password. [A 03.6]
    - Secret Question.
    - Secret Question's Answer.
    - Personal Photo. [UC 01-02-04]-[Upload Personal Photo by Non-Saudi Candidate]

# Personal Certificate. [UC 01 -02-08] – [Upload Personal Certificate for Non Saudi Non Mugeem Candidate]

- 03.8 The actor selects to create his/her account. [A 03.9]
- 03.9 The system validates the account information.
- 03.10 The system displays the following confirmation message to the use "Are you sure you want to create your account?" [A 03.10]
- 03.11 The actor confirms creating account. [A 03.11]
- 03.12 The system displays the following message to the user "Thank you for creating account, your registration number will be sent to your E-mail/mobile. You can use the registration number and your password to login the registration system"
- 03.13 The system creates the candidate account.
- 03.14 The system generates an application number for the candidate request. [BR 03.19]
- 03.15 The system generates Registration Number for the candidate. [BR 03.20]
- 03.16 The system notifies the candidate with the Registration number on his mobile and email address.
- 03.17 The system sets the status of the account application as "Approved".
- 03.18 The system directs the user to the Registration system login page.

#### **Alternative Flow**

- O3.1 In case the candidate type is empty, the system should display the following error message "Please select the candidate type".
- O3.2 In case the "I agree on the Registration Instructions" is not checked, the system should disable moving the candidate to the next step of account registration.
- 03.3 In case the email address is not in the correct format, the system should display the following error message "Invalid Email address".
- 03.4 In case the password is not between 6-20 characters or not combined form letters and numbers, the system should display the following error message "Password length should be between 6-20 and it should be combinations from letters and numbers".
- 03.5 In case the password is null, the system should display the following error message "Please enter the password".
- 03.6 In case the "Confirm password" is not match the password, the system should display the following error message "Password and confirm password should be matched".
- 03.7 In case there is an account with status "Approved" for the same entered national ID, the system should display the following error message to the user "There is already account for the entered national ID".
- 03.8 In case there is account request with status "Sent to RRadmin" for the same entered national Id, the system should display the following error message to the user "there is already an account request for the entered national ID".
- 03.9 In case the actor cancels the operation, the system should direct the user to the Registration system home page with no actions.
- 03.10 In case not all mandatory fields are filled, the system should display the following error message to the user "Please fill all mandatory fields" and mark the mandatory fields with red asterisks.
- 03.11 In case the actor cancels the confirmation message, the system should return the user to the create account page with no actions.

- O3.1 Candidate Type should be "Non-Saudi/Non Muqeem". And the system should retrieve the Registration Instructions of the "Non Saudi/Non Muqeem"
- O3.2 The candidate should checks the "I agree on the registration instruction" in order to be enabled to continue his/her Registration.
- 03.3 The system should retrieve the country code in the National ID field based on the selected country. Each country has a country code represented by two letters in the countries lookups.
- O3.4 National ID should be the country code plus 8 digits and the candidate should enter the latest 8 digits from his/her national ID.
- 03.5 Each digit in the national ID should be filled in a separate textbox.
- 03.6 The actor should have the option to fill the Date of birth in Hijiry/Gregorian.
- 03.7 Submission date should retrieve the current Hijry date [Read only].
- 03.8 Mobile Number should be in a correct format of mobile Number and it should be in two textboxes with the following format. [+ "Country Code"] ["Mobile Number"].
- 03.9 Email Address should be in a correct format of email address [Email Name @hostname.xxx]
- 03.10 The system should filter the "account type level 1" based on the selected "Account Type"
- 03.11 The system should filter the "Account type level2" based in the selected "Account type level1".
- 03.12 The system should filter the "Account type level3" based on the selected "Account type level2".
- 03.13 The system should filter "City" based on the selected Region.
- 03.14 "Schools" should be filtered based on the selected city.
- 03.15 "Password" should be between 6-20 character and it should be a combination of letters and numbers.
- 03.16 "Confirm Password" should match the "Password".
- 03.17 "Personal Photo" is required just in case the candidate gender is "Male".
- 03.18 The actor should have the option to go back to the first step of account registration.
- 03.19 Application number format should be as the following:

YY-MM-XXXX

Where:

YY: Current Hijiry Year.

MM: Current Hijiry Year.

XXXX: sequential number starting from 0001.

- 03.20 Registration number format should be as the following:
  - YY Random Number where:
    - YY: hijiry year (32, 33, 34)
    - 8 Random Numbers and they should be unique.
- 03.21 Finger print photo should be empty and it shouldn't be entered by the user. Finger print photo will be uploaded to the candidate through the finger print device. [See finger print device requirements]
- 03.22 Finger print template should be empty and it shouldn't be appeared to the user. It should be a record in the data base only. [See finger print device requirements.]
- 03.23 National ID shouldn't be registered before.

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - Registration Number should be sent to the candidate by email and SMS.
  - o Account Registration application status should be approved.
  - The actor should have the option to take one of the following actions:
    - Candidate Login [Login use case reference]

# 1.4 [UC 01 -02-04] - [Upload Personal Photo by Non-Saudi Candidate]

#### **Actors**

The Actor of this use case will be a public user "Non Saudi/Non Muqeem Candidate".

#### **Description**

The main objective of this use case is to upload the candidate personal photo. The actor of this use case has to browse his machine and select the file to be uploaded.

#### Trigger

From the Create Candidate Account, the actor selects the personal photo.

#### **Pre-conditions**

- 1. The actor should be in Create Candidate Account page. [UC 01-02-03]-[Create Account for Non Saudi/Non Mugeem Auto Approval]
- 2. Or, the actor should be in "Complete Profile information page".

#### **Normal Flow**

- 04.1 The actor clicks on the Personal photo [BR 04.1] [BR 04.2].
- O4.2 The system displays the "Browse" dialog and prompts the user to select the personal photo. [A 04.2]
- 04.3 The actor selects the personal photo and requests to upload.[A 04.1]
- 04.4 The system checks the selected personal photo.
- O4.5 The system retrieves the selected personal photo and display it on the personal photo filed in the Profile page.

#### **Alternative Flow**

04.1 In case the personal photo is not in Image format [Jpg, Jpeg, Gif...], the system should display the following error message "Personal photo format should be an Image format Jpg, Jpeg, Gif ...."

04.2 In case the candidate gender is "Female", the system should display the following error message "Personal photo only for male candidates"

#### **Business Rules**

- 04.1 The personal photo should be in Image format [Jpg, Jpeg, Gif...].
- 04.2 The personal Photo should be for male candidates only.

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - Candidate personal photo should be updated successfully.

## 1.5 [UC 01 -02-05] - [Create Candidate Account for Without]

#### **Actors**

The Actor of this use case will be a public user "without Identity".

#### **Description**

The main objective for this use case is to create account for Saudi candidate who doesn't have any types of Identities. The actor of this use case has to send his/her basic information to RRadmin (Registration Relations admin). After that the application will be reviewed and studied by the RRadmin to take the appropriate decision.

#### Trigger

From the Registration system (public site) home page, the actor selects to create new account.

#### **Pre-conditions**

1. The actor should be on the registration system Login page.

- 05.1 The actor selects to create new account.
- 05.2 The system directs the user to Create Candidate Account page and prompts him/her to fill the create account first step "Registration Instructions" information; which are the following:
  - Candidate Type [BR 05.1]
  - I Agree on the Registration Instructions [BR 05.2]
- 05.3 The candidate fills the first step of account registration; which are the following:
  - Candidate Type.[A 05.1]

- I agree on the registration instructions. [A 05.2]
- O5.4 The actor selects to move to the next step of account registration; which is "Basic information".
- 05.5 The system validates the first step of account registration.
- O5.6 The system moves the candidate to the second step of account registration which is "Basic Info" and prompts him to fill his/her basic information; which are the following:
  - Gender. [BR 05.3]
  - Mobile Number. [BR 05.4]
  - Email Address. [BR 05.5]
  - First Name.
  - Father Name.
  - Grandfather Name.
  - Family Name.
  - Documents: [UC 01 -02-06] [Upload Documents by "without"
     Candidates]
    - [BR 05.8] تعريف من المدرسة بصورة حديثة مختومة وموضح المرحلة الدراسية 0
    - اثبات حالة (مشهد من الاحوال أو مشهد من جهة رسمية) ٥
    - وثيقة أخرى ٥
  - Submission Date [BR 05.6]
- 05.7 The actor fills the second step of account registration information; which are the following:
  - Gender. [A 05.07] [A 05.8]
  - Mobile Number.
  - Email Address. [A 05.3]
  - First Name.
  - Father Name.
  - Grandfather Name.
  - Family Name.
  - Documents: [UC 01 -02-06] [Upload Documents by "without"
     Candidates]
    - تعريف من المدرسة بصورة حديثة مختومة وموضح المرحلة الدراسية 0
    - اثبات حالة (مشهد من الاحوال أو مشهد من جهة رسمية) ن
    - وثيقة أخرى ٥
  - Submission Date.
- 05.8 The actor selects to submit account request. [A 05.4]
- 05.9 The system validates the entered information.
- 05.10 The system displays the following confirmation message to the user "Are you sure you want to create account". [A 05.5]
- 05.11 The actor confirms creating account [A 05.6]
- 05.12 The system displays the following message to the user "Thank you for sending your information, your application number will be sent to your mobile/email address. We will contact you soon".
- 05.13 The system generates an application number. [BR 05.7]
- 05.14 The system notifies the candidate with the application number at his/her mobile and email address.
- 05.15 The system sets the application status as "Sent to RRadmin".

05.16 The system directs the user to the registration login page.

#### **Alternative Flow**

- 05.1 In case the candidate type is empty, the system should display the following error message "Please select the candidate type".
- 05.2 In case the "I agree on the Registration Instructions" is not checked, the system should disable moving the candidate to the next step of account registration.
- 05.3 In case the email address is not in the correct format, the system should display the following error message "Invalid Email Address".
- O5.4 In case the actor cancels the operation, the system should direct the user to the registration login page with no actions.
- 05.5 In case not all mandatory fields are filled, the system should display the following error message to the user "Please fill all mandatory fields" and mark the mandatory fields with red asterisks.
- O5.6 In case the actor cancels the confirmation message, the system should return the user to Create candidate account page with no actions.
- 05.7 In case the gender is female and there is an open ID creation cycle "Current date is less than the cycle end date and more than the cycle start date" from type "Schools", the system should display the following error message to the user "Please refer to school to know the visit appointments".
- 05.8 In case the gender is female and there is an ID creation cycle will start after "Schools Visits" days, the system should display the following error message to the user "Please refer to school to know the visit appointments"

#### **Business Rules**

- O5.1 Candidate Type should be "Without". And the system should retrieve the Registration Instructions of the "Without" candidates.
- O5.2 The candidate should checks the "I agree on the registration instruction" in order to be enabled to continue his/her Registration.
- 05.3 If the gender is **female**, the system shouldn't allow the candidate to create the account if
  - There is an open ID creation cycle "Current date is less than the cycle end date and more than the cycle start date" from type "Schools".
  - Or if there is an ID creation cycle from type "Schools" will start after "**School visits**" days.
  - "School Visits" is a system parameter from type "Integer"
- 05.4 Mobile Number should be in a correct format of mobile Number and it should be in two textboxes with the following format. [+ "Country Code"] ["Mobile Number"].
- 05.5 Email Address should be in a correct format of email address [Email Name @hostname.xxx]
- 05.6 Submission Date should retrieve the current Hijry Date.
- 05.7 Application number format should be as the following:

YY-MM-XXXX

Where:

YY: Current Hijiry Year. MM: Current Hijiry Year.

#### XXXX: sequential number starting from 0001

05.8 "تعريف من المدرسة بصورة حديثة مختومة وموضح المرحلة الدراسية", this document should be supported with a personal photo for males candidates only. It should be added as a note beside the upload file control.

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - Application Number should be sent to the candidate mobile and email address.
  - o Application status should be "Sent to RRadmin".

# 1.6 [UC 01 -02-06] - [Upload Documents by "without" Candidates]

#### **Actors**

The Actor of this use case will be a public user "without Identity".

#### **Description**

The main objective of this use case is to upload the candidate's documents. The actor of this use case has to browse his machine and select the file to be uploaded.

#### Trigger

From the create candidate account page, the actor selects to upload files.

#### **Pre-conditions**

1 The actor should be in Create Candidate Account page.

- 06.1 The actor selects to browse his/her machine to upload the following details:
  - [BR 06.1] تعريف من المدرسة بصورة حديثة مختومة وموضح المرحلة الدراسية -
- 06.2 The system displays a dialog box and prompts the user to select an Image.
- 06.3 The actor selects the Image and requests to upload. [A 06.1] [A 06.2]
- O6.4 The system uploads the image to the create candidate account page and displays it as a link.
- 06.5 The actor selects to browse his/her machine to upload the following details:
  - [BR 06.1] اثبات حالة (مشهد من الاحوال أو مشهد من جهة رسمية) -
- 06.6 The system displays a dialog box and prompts the user to select an Image.
- 06.7 The actor selects the Image and requests to upload. [A 06.3] [A 06.4]
- 06.8 The system uploads the image to the create candidate account page and displays it as a link.
- 06.9 The actor may select to browse his/her machine to upload the following details:

- Other Document. [BR 06.1]
- 06.10 The system displays a dialog box and prompts the user to select an Image.
- 06.11 The actor selects the Image and requests to upload. [A 06.5]
- 06.12 The system uploads the image to the create candidate account page and displays it as a link.

- 06.1 In case the "تعريف من المدرسة بصورة حديثة مختومة وموضح المرحلة الدراسية" is not uploaded, the system should display the following error message "تعريف من المدرسة بصورة حديثة مختومة وموضح المرحلة should be uploaded".
- 06.2 In case the "تعريف من المدرسة بصورة حديثة مختومة وموضح المرحلة الدراسية" is not Image format, the system should display the following error message "تعريف من المدرسة بصورة حديثة مختومة وموضح should be in Image format JPG, JPEG, GIF ...."
- 06.3 In case the "اثبات حالة (مشهد من الاحوال أو مشهد من جهة رسمية)" is not uploaded, the system should display the following error message "(مشهد من الاحوال أو مشهد من جهة رسمية) should be uploaded".
- 06.4 In case the "(مشهد من الاحوال أو مشهد من جهة رسمية)" is not Image format, the system should display the following error message "(مشهد من الاحوال أو مشهد من جهة رسمية)" should be in Image format JPG, JPEG, GIF ...."
- 06.5 In case the "Other Document" is not Image format, the system should display the following error message "Other Document should be in Image format JPG, JPEG, GIF ...."

#### **Business Rule**

06.1 All uploaded documents should be in Image format [JPG, JPEG, GIF .....].

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - Candidate documents should be updated successfully.

# 1.7 [UC 01 -02-07] - [Create Account for Non Saudi/Non Muqeem Manual Approval]

#### Actors

The Actor of this use case will be a public user "Non Saudi/Non Muqeem Candidate".

### **Description**

The main objective of this use case is to create an account for Non Saudi candidate on the registration system. Each registered candidate has a profile with all candidates' details such as registered exams and grades.

From the Registration system (public site) home page, the actor selects to create new account.

#### **Pre-conditions**

- 1. The actor should be on the registration system Login page.
- 2. The actor shouldn't be registered before.
- 3. "Auto Approval account requests for Non Saudi" should be not checked.

- 07.1 The actor selects to create new account.
- 07.2 The system directs the user to Create Candidate Account page and prompts him/her to fill the create account first step "Registration Instructions" information; which are the following:
  - Candidate Type [BR 07.1]
  - I Agree on the Registration Instructions [BR 07.2]
- 07.3 The actor fills the first step of account registration information which are the following:
  - Candidate Type.[A 07.1]
  - I agree on the registration instructions. [A 07.2]
- 07.4 The actor selects to move to the next step of account registration; which is "Basic Info".
- 07.5 The system validates the first step of account registration.
- O7.6 The system moves the candidate to the next step of account registration and prompts him/her to fill the basic information; which are the following:
  - Country.
  - National ID. [BR 07.3] [BR 07.4] [BR 07.5] [BR 07.6]
  - Gender.
  - Date of Birth [BR 07.7]
  - First Name.
  - Father Name.
  - Grandfather Name.
  - Family Name.
  - Mobile Number. [BR 07.9]
  - Email Address. [BR 07.10]
  - Personal Certificate. [UC 01 -02-08] [Upload Personal Certificate for Non Saudi Non Mugeem Candidate]
  - Submission Date. [BR 07.8]
- 07.7 The actor fills the basic information; which are the following:
  - Country
  - National ID. [A 07.3] [A 07.4]
  - Gender.
  - Date of Birth
  - First Name.
  - Father Name
  - Grandfather Name.

- Family Name.
- Mobile Number.
- Email Address. [A 07.5]
- Personal Certificate. [UC 01 -02-08] [Upload Personal Certificate for Non Saudi Non Muqeem Candidate]
- Submission Date.
- 07.8 The actor selects to submit his/her information. [A 07.6]
- 07.9 The system validates the entered information.
- 07.10 The system displays the following confirmation message to the user "Are you sure you want to create account". [A 07.7]
- 07.11 The actor confirms creating account [A 07.8]
- 07.12 The system displays the following message to the user "Thank you for sending your information, your application number will be sent to your mobile/email address. We will contact you soon".
- 07.13 The system generates an application number. [BR 07.11]
- 07.14 The system notifies the candidate with the application number at his/her mobile and email address.
- 07.15 The system sets the application status as "Sent to RRadmin".
- 07.16 The system directs the user to the registration login page.

- 07.1 In case the candidate type is empty, the system should display the following error message "Please select the candidate type".
- O7.2 In case the "I agree on the Registration Instructions" is not checked, the system should disable moving the candidate to the next step of account registration.
- 07.3 In case there is an account with status "Approved" for the same entered national ID, the system should display the following error message to the user "There is already account for the entered national ID".
- 07.4 In case there is account request with status "Sent to RRadmin" for the same entered national Id, the system should display the following error message to the user "there is already an account request for the entered national ID".
- 07.5 In case the email address is not in the correct format, the system should display the following error message "Invalid Email address"
- O7.6 In case the actor cancels the operation, the system should direct the actor to Registration Login page with no actions.
- 07.7 In case not all mandatory fields are filled, the system should display the following error message to the user "Please fill all mandatory fields", and mark the mandatory fields with red asterisks.
- 107.8 In case the actor cancels the confirmation message, the system should return the user to the create candidate account page with no actions.

#### **Business Rules**

07.1 Candidate Type should be "Non-Saudi/Non Muqeem". And the system should retrieve the Registration Instructions of the "Non Saudi/Non Muqeem"

- 07.2 The candidate should checks the "I agree on the registration instruction" in order to be enabled to continue his/her Registration.
- 07.3 The system should retrieve the country code in the National ID field based on the selected country. Each country has a country code represented by two letters in the countries lookups.
- 07.4 National ID shouldn't be registered before.
- 07.5 National ID should be the country code plus 8 digits and the candidate should enter the latest 8 digits from his/her national ID.
- 07.6 Each digit in the national ID should be filled in a separate textbox.
- 07.7 The actor should have the option to fill the date of birth in Hijiry/Gregorian.
- 07.8 Submission date should retrieve the current Hijry date [Read only].
- 07.9 Mobile Number should be in a correct format of mobile Number and it should be in two textboxes with the following format. [+ "Country Code"] ["Mobile Number"].
- 07.10 Email Address should be in a correct format of email address [Email Name @hostname.xxx]
- 07.11 Application number format should be as the following:

YY-MM-XXXX

Where:

YY: Current Hijiry Year. MM: Current Hijiry Year.

XXXX: sequential number starting from 0001.

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - o Application Number should be sent to the candidate mobile and email address.
  - o Application status should be "Sent to RRadmin".

# 1.8 [UC 01 -02-08] - [Upload Personal Certificate for Non Saudi Non Muqeem Candidate]

#### Actors

The Actor of this use case will be a public user "Non Saudi/Non Mugeem Candidate".

#### **Description**

The main objective of this use case is to upload the candidate personal Certificate. The actor of this use case has to browse his machine and select the file to be uploaded.

#### Trigger

From the Create Candidate Account, the actor selects to browse his/her machine.

#### **Pre-conditions**

- 1. The actor should be in "Create Candidate Account page". [UC 01-02-03]- [Create Account for Non Saudi/Non Muqeem Auto Approval].
- 2. Or, the actor should be in Create candidate account page. [UC 01-02-07]- [Create Account for Non Saudi/Non Muqeem Manual Approval].

#### **Normal Flow**

- 08.1 The actor selects to browse his/her machine to upload the personal certificate. [BR 08.1]
- O8.2 The system displays the "Browse" dialog and prompts the user to select the personal Certificate.
- 08.3 The actor selects the personal certificate and requests to upload.[A 08.1]
- 08.4 The system checks the selected personal Certificate.
- 08.5 The system uploads the personal certificate to the create account page and displays it as a link.

#### **Alternative Flow**

08.1 In case the personal photo is not in Image format [Jpg, Jpeg, Gif...], the system should display the following error message "Personal photo format should be an Image format Jpg, Jpeg, Gif ....".

#### **Business Rules**

08.1 The personal Certificate should be in Image format [Jpg, Jpeg, Gif...].

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - Candidate personal Certificate should be uploaded successfully.

# 2 Follow Up Candidates Accounts:

## 2.1 [UC 01 -04-01] - [Search Saudi/Mugeem Account Requests]

#### **Actors**

The Actor of this use case will be an internal user with the role of "Registration Relation Admin"

#### **Description**

The main objective of this use case is searching for un-success account requests for Saudi/Muqeem candidates. The actor of this use case has the ability to search for application by using the search filtration criteria.

#### Trigger

From the Registration system internal home page, the actor selects to search for Saudi/Muqeem Accounts' requests.

#### **Pre-conditions**

- 1. The actor should be logged in to the system.
- 2. The actor should be in the registration system internal home page.

- 01.1 The actor selects to search for Saudi/ Mugeem accounts requests.
- O1.2 The system directs the user to the "Search Account Requests for Saudi and Muqeem" page and prompts him to fill in the search filtration criteria; which are the following:
  - Gender.
  - Application Number.
  - National ID/Iqama Number.
  - Candidate Full Name. [BR 01.1]
  - Mobile Number.
  - Status. [BR 01.2]
  - Submission Date
    - o From.
    - To.
- 01.3 The system displays Saudi/Muqeem Accounts requests grid with the following details: [BR 01.3]
  - Gender.
  - Application Number.
  - National ID/Igama Number.
  - Candidate Full Name.
  - Mobile Number.
  - Status.

- Submission Date
- 01.4 The Actor may fill in the search filtration criteria; which are the following:
  - Application Number.
  - Gender.
  - National ID/Igama Number.
  - Candidate Full Name.
  - Mobile Number.
  - Status.
  - Submission Date
    - o From.
    - o To.
- 01.5 The actor selects to search for Accounts Requests based on the entered filtration criteria.
- 01.6 The system retrieves all search results in the Saudi/Muqeem Accounts requests grid with the following details: [A 01.1]
  - Application Number.
  - Gender.
  - National ID/Igama Number.
  - Candidate Full Name.
  - Mobile Number.
  - Submission Date

01.1 In case there is no search results match the entered the filtration criteria, the system should display the following alert message "No Records Found".

#### **Business Rules**

- 01.1 Candidate full name should be the following:
  - First Name.
  - Father Name.
  - Grandfather Name.
  - Family Name.
- 01.2 Application status should be one of the following statuses:
  - Sent to RRadmin.
  - Approved.
- O1.3 Saudi/Muqeem Accounts requests grid should retrieve all account requests and sorted by the application Number as a default value.

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - o All search results should be retrieved based on the entered filtration criteria.
  - The actor should have the option to take the following action(s):

 View Account Request. [UC 01-04-04]-[View Saudi/ Muqeem Account Request]

# 2.2 [UC 01 -04-02] - [Search Non Saudi/Non Mugeem Account Requests]

#### **Actors**

The Actor of this use case will be an internal user with the role of "Registration Relation Admin"

#### **Description**

The main objective of this use case is searching for Non Saudi non Muqeem candidates account requests. The actor of this use case has the ability to search for application by using the search filtration criteria.

#### Trigger

From the Registration system internal home page, the actor selects to search for Non Saudi/Non Muqeem Accounts' requests.

#### **Pre-conditions**

- 1. The actor should be logged in to the system.
- 2. The actor should be in the registration system internal home page.

- 02.1 The actor selects to search for Non Saudi/ Non Muqeem accounts requests.
- 02.2 The system directs the user to the "Search Account Requests for Non Saudi and Non Muqeem" page and prompts him to fill in the search filtration criteria; which are the following:
  - Application Number.
  - Gender.
  - Country.
  - Name (Full). [BR 02.1]
  - Status. [BR 02.2]
  - Submission Date
    - o From.
    - o To.
- O2.3 The system displays Non Saudi/Non Muqeem Accounts requests grid with the following details: [BR 02.3]
  - Application Number.
  - Gender
  - Country.
  - Name (Full).

- Status.
- Submission Date
- 02.4 The Actor may fill in the search filtration criteria; which are the following:
  - Application Number.
  - Gender
  - Country.
  - Name (Full).
  - Status.
  - Submission Date
    - o From.
    - o To.
- 02.5 The actor selects to search for Accounts Requests based on the entered filtration criteria.
- O2.6 The system retrieves all search results in the Non Saudi/Non Muqeem Accounts requests grid with the following details: [A 02.1]
  - Application Number.
  - Gender
  - Country.
  - Name (Full).
  - Status.
  - Submission Date

01.2 In case there is no search results match the entered the filtration criteria, the system should display the following alert message "No Records Found".

#### **Business Rules**

- 02.1 Candidate full name should be the following:
  - First Name.
  - Father Name.
  - Grandfather Name.
  - Family Name.
- 02.2 Application status should be one of the following statuses:
  - Sent to RRadmin.
  - Notification Sent.
  - Application Modified.
  - Approved.
- 02.3 Non Saudi/ Non Muqeem Accounts requests grid should retrieve all account requests and sorted by the application Number as a default value.

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - o All search results should be retrieved based on the entered filtration criteria.
  - The actor should have the option to take the following action(s):

 View Account Request. [UC 01 -04-05] – [View Non Saudi/Non Muqeem Account Request]

# 2.3 [UC 01 -04-03] - [Search With-out Account Requests]

#### Actors

The Actor of this use case will be an internal user with the role of "Registration Relation Admin"

#### **Description**

The main objective of this use case is searching for With-out candidates account requests. The actor of this use case has the ability to search for application by using the search filtration criteria.

#### Trigger

From the Registration system internal home page, the actor selects to search for With-out Accounts' requests.

#### **Pre-conditions**

- 1. The actor should be logged in to the system.
- 2. The actor should be in the registration system internal home page.

- 03.1 The actor selects to search for With-out accounts requests.
- O3.2 The system directs the user to the "Search Account Requests for With-out" page and prompts him to fill in the search filtration criteria; which are the following:
  - Application Number.
  - Gender
  - Mobile Number.
  - Full Name [BR 03.1]
  - Status. [BR 03.2]
  - Submission Date.
    - o From.
    - o To.
- 03.3 The system displays With-out Accounts requests grid with the following details: [BR 03.3]
  - Application Number.
  - Gender
  - Name (Full).
  - Status.
  - Submission Date
- 03.4 The Actor may fill in the search filtration criteria; which are the following:
  - Application Number.

- Gender
- Mobile Number.
- Full Name
- Status.
- Submission Date.
  - o From.
  - o To.
- 03.5 The actor selects to search for Accounts Requests based on the entered filtration criteria.
- O3.6 The system retrieves all search results in the With-out Accounts requests grid with the following details: [A 03.1]
  - Application Number.
  - Gender
  - Name (Full).
  - Status.
  - Submission Date

03.1 In case there is no search results match the entered the filtration criteria, the system should display the following alert message "No Records Found".

#### **Business Rules**

- 03.1 Candidate full name should be the following:
  - First Name.
  - Father Name.
  - Grandfather Name.
  - Family Name.
- 03.2 Application status should be one of the following statuses:
  - Sent to RRadmin.
  - Notification Sent.
  - Application Modified.
  - Approved.
- 03.3 With-out Accounts requests grid should retrieve all account requests and sorted by the application Number as a default value.

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - o All search results should be retrieved based on the entered filtration criteria.
  - The actor should have the option to take the following action(s):
    - View Account Request. [UC 01 -04-06] [View With-out Account Request]

# 2.4 [UC 01 -04-04] - [View Saudi/Muqeem Account Request]

#### **Actors**

The Actor of this use case will be an internal user with the role of "Registration Relation Admin"

#### **Description**

The main objective of this use case is to view the details of the candidate account request for Saudi and Muqeem in order to complete their account registration either by send notification or by confirming their registration.

#### Trigger

From the "Search Account Requests for Saudi and Muqeem", the actor selects to view candidate account request.

#### **Pre-conditions**

- 1. The actor should be logged in to the system.
- The actor should be in the "Search Account Requests for Saudi and Muqeem". [UC 01-04-01]-[Search Saudi/ Muqeem Account Applications]
- 3. Candidate Account Request status should be
  - a. "Sent To RRadmin".
  - b. Or "Approved"

#### **Normal Flow**

- 04.1 The actor selects one application from "Saudi/Muquem Accounts requests" grid and request to view application. [BR 04.1]
- O4.2 The system directs the user to the view candidate account request and displays the candidate's basic information which are the following: [SUB 04.1]
  - National ID number/Igama Number.
  - First Name.
  - Father Name.
  - Grandfather Name.
  - Family Name.
  - Date Of Birth
  - Gender.
  - Personal Certificate. [UC 01 -04-07] [View Personal Certificate]
  - Mobile Number.
  - Email Address.

#### Sub Flow

- O4.1 In case the candidate account request status is "Approved", the system should display the following candidate details:
  - Basic Information:
    - National ID number/Iqama Number.
    - First Name.

- Father Name.
- Grandfather Name.
- Family Name.
- Date of Birth.
- Gender.
- Submission date.
- Contact information:
  - Mobile Number.
  - Other Mobile Number
  - Email Address
- Profile information:
  - Account Type.
  - Account Type Level one.
  - Account Type Level two.
  - Account Type Level Three.
  - Region.
  - City.
  - School Name.
  - Personal Photo. [BR 04.2]
  - Personal Certificate.
  - Fingerprint Photo.
  - Finger print template.

N/A

#### **Business Rules**

- 04.1 Candidate account request should be:
  - Editable: if the account request status is "Sent to RRadmin".
  - **Read only**: if the account request status is "Approved".
- 04.2 Personal Photo for male candidates only.

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - o Candidate details should be displayed.
  - The actor should have the option to take one of the following actions just in case the application status is "Sent to RRadmin"
    - Complete account Registration.
    - Delete Account Registration.
    - Check Candidate information with AL-Elm

# 2.5 [UC 01 -04-05] - [View Non Saudi/Non Muqeem Account Request]

#### **Actors**

The Actor of this use case will be an internal user with the role of "Registration Relation Admin"

#### **Description**

The main objective of this use case is to view the details of the candidate account request for Non Saudi and Non Muqeem in order to complete their account registration either by send notification or by confirming their registration.

#### Trigger

From the "Search Account Requests for Non Saudi and Non Muqeem", the actor selects to view candidate account request.

#### **Pre-conditions**

- 1. The actor should be logged in to the system.
- 2. The actor should be in the "Search Account Requests for Non Saudi Non Muqeem". [UC 01 04-02] [Search Non Saudi/Non Muqeem Account Requests]
- 3. Candidate Account Request status should be
  - a. "Sent To RRadmin"
  - b. "Application modified"
  - c. "Notification Sent".
  - d. "Approved"

- The actor selects one application from "Non Saudi/Non Muquem Accounts requests" grid and request to view application. [BR 05.1] [BR 05.2] [BR 05.4]
- The system directs the user to the view candidate account request and displays the candidate's basic information which are the following: [SUB 05.1] [SUB 05.2]
  - Country.
  - National ID
  - Gender.
  - Date of Birth
  - First Name.
  - Father Name.
  - Grandfather Name.
  - Family Name.
  - Mobile Number.
  - Email Address.
  - Personal Certificate. [UC 01 -04-07] [View Personal Certificate]

#### **Sub Flow**

- O5.1 In case the status of the account request is **approved**, the system should display the following candidate details:
  - Basic Information:
    - National Number.
    - First Name.
    - Father Name.
    - Grandfather Name.
    - Family Name.
    - Date of Birth.
    - Gender.
    - Submission date.
  - Contact information:
    - Mobile Number.
    - Other Mobile Number
    - Email Address
  - Profile information:
    - Account Type.
    - Account Type Level one.
    - Account Type Level two.
    - Account Type Level Three.
    - Region.
    - City.
    - School Name.
    - Personal Photo. [BR 05.5]
    - Personal Certificate.
    - Fingerprint Photo.
    - Finger print template
  - Required Documents. [UC 01 -04-08] [View Uploaded files by RRadmin] [UC 01 -06-08] [Complete Account Registration] [BR 05.3]
    - Candidate comments. [UC 01 -06-08] [Complete Account Registration] [BR 05.3]
- O5.2 In case the candidate account request status is **"Application modified"**, the system should display the following details for the candidate:
  - Country.
  - National ID
  - Gender.
  - Date of Birth
  - First Name.
  - Father Name.
  - Grandfather Name.
  - Family Name.
  - Mobile Number.
  - Email Address.

- Personal Certificate. [UC 01 -04-07] [View Personal Certificate]
- Submission Date.
- Required Documents. [UC 01 -04-08] [View Uploaded files by RRadmin] [UC 01 -06-08] [Complete Account Registration] [BR 05.3]
- Candidate comments. [UC 01 -06-08] [Complete Account Registration] [BR 05.3]

N/A

#### **Business Rules**

- 05.1 Candidate Information should be read only.
- 05.2 The status of the candidate account request should be New, or Notification sent.
- O5.3 This fields should be appeared only if the status of the account request went through the following chain:

Sent to RRadmin > Notification Sent > Application modified > Approved.

Or, Sent to RRadmin > Notification Sent > Application modified

- 05.4 Candidate account request should be:
  - Editable: if the account request status is "Sent to RRadmin" or "Application modified".
  - Read only: if the account request status is "Approved" or "Notification Sent"
- 05.5 Personal Photo for male candidates only

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - o Candidate details should be displayed.
  - The actor should have the option to take one of the following actions just in case the application status is "Sent to RRadmin" or "Application modified":
    - Confirm Account.
    - Send Notification.

# 2.6 [UC 01 -04-06] - [View With-out Account Request]

Actors			

The Actor of this use case will be an internal user with the role of "Registration Relation Admin"

## **Description**

The main objective of this use case is to view the details of the candidate account request for With-out in order to complete their account registration either by send notification or by confirming their registration.

## Trigger

From the "Search Account Requests for With-out", the actor selects to view candidate account request.

#### **Pre-conditions**

- 1. The actor should be logged in to the system.
- 2. The actor should be in the "Search Account Requests for With-out". [UC 01 -04-03] [Search With-out Account Requests]
- 3. Candidate Account Request status should be
  - a. "New"
  - b. "Application modified"
  - c. "Notification Sent".
  - d. "Approved"

#### **Normal Flow**

- 06.1 The actor selects one application from "Non Saudi/Non Muqeem Accounts requests" grid and request to view application. [BR 06.1] [BR 06.2] [BR 06.4]
- O6.2 The system directs the user to the view candidate account request and displays the candidate's basic information which are the following: [SUB 06.1] [SUB 06.2]
  - Gender.
  - Mobile Number.
  - Email Address.
  - First Name.
  - Father Name.
  - Grandfather Name.
  - Family Name.
  - Documents [UC 01 -04-08] [View Uploaded files by RRadmin]
    - تعريف من المدرسة بصورة حديثة مختومة وموضح المرحلة الدراسية ٥
    - اثبات حالة (مشهد من الاحوال أو مشهد من جهة رسمية) ٥
    - وثيقة أخرى ٥

## **SUB Flow**

- O6.1 In case the status of the account request is **approved**, the system should display the following candidate details:
  - Basic Information:
    - National Number.
    - First Name.
    - Father Name.
    - Grandfather Name.

- Family Name.
- Date of Birth.
- Gender.
- Submission date.
- Contact information:
  - Mobile Number.
  - Other Mobile Number
  - Email Address
- Profile information:
  - Account Type.
  - Account Type Level one.
  - Account Type Level two.
  - Account Type Level Three.
  - Region.
  - City.
  - School Name.
  - Personal Photo. [BR 06.5]
  - Fingerprint Photo.
  - Finger print template
- Required Documents. [UC 01 -04-08] [View Uploaded files by RRadmin] [UC 01 06-08] [Complete Account Registration] [BR 06.3]
- Candidate comments. [UC 01 -06-08] [Complete Account Registration] [BR 06.3]
- O6.2 In case the candidate account request status is **"Application modified"**, the system should display the following details for the candidate:
  - Gender.
  - Mobile Number.
  - Email Address.
  - First Name.
  - Father Name.
  - Grandfather Name.
  - Family Name.
  - Documents [UC 01 -04-08] [View Uploaded files by RRadmin]
    - تعريف من المدرسة بصورة حديثة مختومة وموضح المرحلة الدراسية ٥
    - اثبات حالة (مشهد من الاحوال أو مشهد من جهة رسمية) ٥
    - وثيقة أخرى ٥
  - Required Documents. [UC 01 -04-08] [View Uploaded files by RRadmin] [UC 01 -06-08] [Complete Account Registration] [BR 06.3]
  - Candidate comments. [UC 01 -06-08] [Complete Account Registration] [BR 06.3]

Alternative Flow	
N/A	

**Business Rules** 

- 06.1 Candidate Information should be read only.
- 06.2 The status of the candidate account request should be New, or Notification sent.
- O6.3 This fields should be appeared only if the status of the account request went through the following chain:
  - Sent to RRadmin > Notification Sent > Application modified > Approved.
  - Or, Sent to RRadmin > Notification Sent > Application modified.
- 06.4 Candidate account request should be:
  - Editable: if the account request status is "Sent to RRadmin" or "Application modified".
  - Read only: if the account request status is "Approved" or "Notification Sent"
- O6.5 Personal Photo for Male candidates only.

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - o Candidate details should be displayed.
  - The actor should have the option to take one of the following actions just in case the application status is "Sent to RRadmin" or "Application modified":
    - Confirm Account.
    - Send Notification.

# 2.7 [UC 01 -04-07] - [View Personal Certificate]

#### **Actors**

The Actor of this use case will be an internal user with the role of "Registration Relation Admin"

## **Description**

The main objective of this use case is to view the personal certificate which uploaded by the candidate.

## Trigger

From the "View Candidate Account Request" page, the actor selects to view the personal Certificate.

## **Pre-conditions**

- 1. The actor should be logged in to the system.
- 2. The actor should be in view candidate account request page.

[UC 01 -04-04] – [View Saudi/Muqeem Account Request]
[UC 01 -04-05] – [View Non Saudi/Non Muqeem Account Request]

- 07.1 The actor select to view the candidate personal Certificate.
- 07.2 The system displays the download dialog to the actor and prompts him to open the Image.
- 07.3 The actor selects to open the Image. [A 07.1] [A 07.2]
- 07.4 The system displays the personal certificate to the user on the web-Browser.

- 07.1 In case the user selects to save the Image, the system should display the save dialog to the user and prompts him to selects the path of the image to be saved.
  - 07.1.1 The actor selects the path of the Image.
  - 07.1.2 The actor selects to save the Image.
  - 07.1.3 The system saves the Image on the actor's local machine.
- 07.2 In case the actor selects to cancel the operation, the system should return the user to the view candidate account request page with no actions.

#### **Business Rules**

N/A

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success: Personal Certificate should be displayed to the user.

# 2.8 **[UC 01 -04-08] - [View Uploaded files by RRadmin]**

## Actors

The Actor of this use case will be an internal user with the role of "Registration Relation Admin"

## **Description**

The main objective of this use case is to view the uploaded documents which are uploaded by the candidate.

## Trigger

From the "View Candidate Account Request" page, the actor selects to view the personal Certificate.

## **Pre-conditions**

1. The actor should be logged in to the system.

- 2. The actor should be in view candidate account request page.
  - [UC 01 -04-04] [View Saudi/Muqeem Account Request]
  - [UC 01 -04-05] [View Non Saudi/Non Muqeem Account Request]
  - [UC 01 -04-06] [View With-out Account Request]

## **Normal Flow**

- 08.1 The actor selects to view uploaded document in the candidate account request page.
- 08.2 The system displays the download dialog to the actor and prompts him to open the file.
- 08.3 The actor selects to open the Image. [A 08.1] [A 08.2]
- 08.4 The system displays the uploaded file to the user on the web-Browser.

#### **Alternative Flow**

- 08.1 In case the user selects to save the file, the system should display the save dialog to the user and prompts him to selects the path of the file to be saved.
  - 08.1.1 The actor selects the path of the file.
  - 08.1.2 The actor selects to save the file.
  - 08.1.3 The system saves the file on the actor's local machine.
- 08.2 In case the actor selects to cancel the operation, the system should return the user to the view candidate account request page with no actions.

#### **Business Rules**

N/A

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success: Uploaded file should be displayed to the user.

# 3 Test Registration Use Cases:

# 3.1 [UC 01 -05-01] - [Register Candidate for Test]

#### **Actors**

The actor of this use case will be a public user with role "Candidate".

#### **Description**

The main objective of this use case is to describe the test registration process. The actor of this use case browses the available tests/appointment and selects the test to be registered.

## Trigger

From the Candidate home page, the actor selects to register for test.

#### **Pre-Conditions**

- 1. The actor should be logged in [UC 01 -06-05] [Log in Candidate]
- 2. The actor should be in the public site home page.
- 3. "Enable Registration" should be checked in the test session.

- 01.1 The actor selects to register for a test.
- O1.2 The system directs the user to available test page and displays the available tests grid to the candidate with the following details:
  - Session Name. [BR 01.1] [BR 01.2]
  - Session Status. [BR 01.3]
- O1.3 The system prompts the user to select a test session from the available tests grid. [BR O1.4] [BR O1.5]
- 01.4 The actor selects a test session from the available tests grid and request to register.
- O1.5 The system directs the user to the candidate test registration page. [A 01.13] [A 01.14]
- O1.6 The system directs the user to the first step of the test registration which is "Registration Instructions" and display the following information to the user: [A 01.1] [A 01.3]
  - Registration Instructions. [BR 01.6]
- O1.7 The system prompts the user to accept the registration instruction by filling the following filed:
  - I Agree on the Registration Instructions.
- 01.8 The actor fills the first step of the test registration information which is the following:
  - I Agree on the Registration Instructions. [A 01.2]
- O1.9 The actor selects to move to the next step of the Test Registration which is "Select Appointment".

- 01.10 The system directs the user to the next step of test registration and displays the appointments grid to the candidate with the following details: [BR 01.7] [BR 01.8] [BR 01.10]
  - Day(s).
  - Period(s).
  - Specialty(s).
  - Test Centers(s). [BR 01.30] [UC 01 -05-03] [View Center Details].
  - Appointments. [BR 01.9] [BR 01.31]
- 01.11 The system prompts the user to select one appointment from the appointments grid.[BR 01.11]
- 01.12 The actor may search for a certain center. [UC 01 -05-02] [Search for test center].
- 01.13 The actor may select to view center details. [UC 01 -05-03] [View Center Details].
- 01.14 The actor selects an appointment to be registered. [BR 01.12]
- 01.15 The system displays the selected appointment details the user with the following confirmation message "your selected appointment details are the following": [BR 01.32]
  - Session Name.
  - Day.
  - Period.
  - Test Center Name.
- 01.16 The actor selects to move to the next step of test registration "Payment"
- 01.17 The system moves the candidate to the next step of test registration which is "Payment" and prompts him/her to select a payment way from the payment options; which are the following: [A 01.4]
  - Candidate Balance. [BR 01.13] [BR 01.14]
  - SADAD.
  - Credit Card.
  - "بطاقات الراجحي" . Vouchers
- 01.18 The system displays the test fees to the user [BR 01.15]
- 01.19 The actor may charge his balance before selecting the payment way. [UC 01-05-05] [Charge Candidate Balance]
- 01.20 The candidate selects the payment way from the payment options; which are the following: [A 01.6][A 01.7] [A 01.8]
  - Candidate Balance.[A 01.5]
  - SADAD. [SUB 01.3]
  - Visa Credit Card. [SUB 01.1]
  - Voucher. [SUB 01.2]
- 01.21 The system deducts the registration fees from the candidate's balance.
- 01.22 The system displays the following message to the user "Paid successfully".
- 01.23 The system moves the actor to the final step of the test registration which is "Registration Notice" and displays the following information to the candidate.[BR 01.19]
  [A 01.11] [A 01.12]
  - Candidate Details: [BR 01.20]
    - Full Name.
    - National ID.
    - Registration Number.
  - Appointment Details: [BR 01.21]

- Day.
- Date.
- Period.
- Specialty.
- Group Details
  - Group Number. [BR 01.22] [BR 01.23]
- Center Details [BR 01.24]
  - Region.
  - City.
  - Center Name.
- Payment details:
  - Payment Status. [BR 01.25]
- Session Notes. [BR 01.26]
- Bar Code. [BR 01.27]
- Registration Status. [BR 01.28]
- Identity Notes. [BR 01.29]
- Registration time. [BR 01.33]
- Seat Number. [BR 01.34]
- 01.24 The actor may print the Registration notice. [UC 01 -05-04] [Print Registration Notice].
- 01.25 The actor selects to finish the test Registration.
- 01.26 The system publishes the test registration on the candidate dashboard with the following details:
  - [Details pending on Qiyas]
- 01.27 The system directs the candidate to public site home page.

- 01.1 In case the actor has a registered test for the same test session with registration status "Confirmed", "Not Confirmed/waiting payment" the system should display the following error message "You already have a registered test for the selected test session".
- 01.2 In case the "I Agree on Registration Instructions" is not checked, the system should displayed the following error message "You have to accept the registration instructions to move to the next step".
- 01.3 In case the result of the beneficiary agency is false, the system shouldn't allow the user to continue his test registration and display an error message to the user [Message content].
- 01.4 In case the "Accept fees from Beneficiary agency" is checked at the session level, the system should direct the user to the final step of Registration which is "Registration Notice".
- 01.5 In case the candidate balance is less than the registration fees, the system should deduct the candidate balance and prompts the candidate to pay the rest of the amount through the other payment methods".
  - 01.5.1 The candidate may select other payment method.
  - 01.5.2 The candidate may select to pay later.
- 01.6 In case the actor selects "Pay later", the system should move the actor to the final step of test registration which is "Registration Notice" and set the registration status based on the test registration as either:

- Not Confirmed/Waiting payment.
- Waiting List/Waiting Payment.
- 01.7 In case the session status is "Early Registration" and the actor selects to pay later and the "Activate registration cancelation for early non-paid registration" is checked in the session information, the system should display the following warning message to the user "If you don't pay for the test during (XX) hours, the system will cancel your registration" and the (XX hours) value will be retrieved from the "Grace period of Early Payment" from the session information. Then the system should move the actor to the final step of test registration.
- 01.8 In case the session status is "Late Registration" and the actor selects to pay later and the "Activate registration cancelation for Late non-paid registration" is checked in the session information, the system should display the following warning message to the user "If you don't pay for the test during (XX) hours, the system will cancel your registration" and the (XX hours) value will be retrieved from the "Grace period of Late Payment" from the session information. Then the system should move the actor to the final step of test registration.
- 01.9 In case the Voucher Code is wrong, the system should display the following error message "Invalid Voucher Code".
- 01.10 In case the Voucher Value is less than the registration fees, the system should display the following error message to the candidate "Voucher Value is not enough".
- 01.11 In case the Candidate is female and she doesn't have a national ID or Qiyas Smart Card, the system should prompt the candidate to select an appointment to issue Qiyas smart.
  - 01.11.1 [Pending Appointment details till the ID creation module SRS being finished]

01.11.2 ......

- 01.12 In case the "Identification Verification" is checked in the test session information and the candidate is female, the system should prompts the candidate to select the Identity type for attending the test from the following list: [BR 01.18]
  - National ID.
  - Separate Passport.
  - University ID card with Photo.
  - Qiyas Smart Card.
  - بطاقة دخول الاختبار -
  - 01.12.1 The candidate selects one Identity type from the Identity types; which are the following:
    - National ID.
    - Separate Passport.
    - University ID card with Photo.
    - Qiyas Smart Card.
    - بطاقة دخول الاختبار -
  - 01.12.2 The actor selects to complete her test registration.
  - 01.12.3 The system returns the user to the final test registration step which is "Registration Notice"
- 01.13 In case the selected test session has a blocked/exclusive list and the candidate it out of the exclusive list or In the blocked list, the system should display the following the error

# message which entered by the registration admin in the blocked/exclusive list page [Refer to the set exclusive/blocked list to the test session in the test module SRS]

O1.14 In case the actor has a test registration for the selected session before as waiting list and he/she reached the number of waiting list registration, the system should display the following error message to the user "you can't register for this session as you have reached the maximum number of registration times as waiting list"

#### Sub Flow

- 01.1 In case the actor selects Visa Credit Card [Pending]
- 01.2 In case the actor selects Voucher, the system prompts the user to enter the following:
  - Voucher Code.[BR 01.16] [BR 01.17]
  - 01.2.1 The actor fills the Voucher information which is the following:
    - Voucher Code
  - 01.2.2 The actor selects to pay for test.
  - 01.2.3 The system checks the entered voucher Code. [A 01.9] [A 01.10]
  - 01.2.4 The system deducts the registration fees from the entered voucher code.
  - 01.2.5 The system displays the following message to the user "Paid successfully"
  - 01.2.6 The system moves the actor to the final step of test registration which is "Registration Notice".
- 01.3 In case the actor selects "SADAD" [Pending]

#### **Business Rule**

- 01.1 Session Name format should be as the following:
  - (Test Name MM YY) Where:7
    - Test Name: Test Name in the template details.
    - MM: Month of the start Registration Date
    - YY: Year of the Start Registration Date
- 01.2 The actor should be able to view the test sessions based on the following rules:
  - For the candidate:
    - Account Type: should match the selected account type in the Test Template.
    - Account Type Level1: should match the selected account type in the Test Template.
    - Account Type Level2 : should match the selected account type in the Test
       Template (If it is selected at the template level)
    - Date of Birth: should match the selected date of birth in the test template (If it is selected at the template level)
  - And, Test Session:
    - Session Gender should match the Candidate Gender.
  - And, Test Center:
    - Center Gender should match the Candidate Gender.
  - **Otherwise,** if the above details are not matched with the candidate details, the candidate shouldn't be able to view the test session.
- 01.3 Session Status should be one of the following:

- **Early Registration**: Late Registration date is not due.
- Late Registration. Late Registration Date is due.
- The actor shouldn't be able to register for a test if he/she has a test registration for the selected session with registration status "Confirmed" or "Not confirmed/waiting payment". But if he/she has a test registration for the selected session with registration status "Confirmed/ waiting List", "Waiting list/waiting payment", or "Canceled", the system should allow registration. The actor has a fixed number of waiting list registrations for the same exam [System parameter]
- 01.5 If the test selected test session is associated with the beneficiary agency and the "Check beneficiary agency" field is checked at the session level the system should check the candidate with the beneficiary agency based on the selected service at the session level. [Refer to the integration with the beneficiary agency].
- O1.6 Registration Instructions should be displayed based on the selected test session since each test session has its own instructions.
- O1.7 The system should display the appointments grid based on the selected test session. Each test session should be scheduled in order to be displayed on the appointments grid.
- O1.8 All Appointments should be appeared as it scheduled before by the Registration Admin [Refer to Test schedule use cases].
- 01.9 Appointments should be displayed as the following:
  - Available. [To be appeared in Green ]
  - Waiting List. [to be appeared in Orange]
  - **Blocked**. [to be appeared in Gray without the caption "Blocked"]
  - **Unavailable**. [To be Appeared in Black without the caption "Unavailable"]
  - Full. [to be appeared in Red]
- 01.10 The actor should be able to select only either:
  - Available Appointment.
  - Waiting List Appointment.
- 01.11 The following is the Appointments grid (For Clarification purposes)

Day			Day 1	(Date)	Day 2 (date)					
Center	Period 1		Period 2		Period 3		Period 1		Period 2	
Center 1					<u>Av</u>		<u>Av</u>	<u>Av</u>		<u>Av</u>
Center 2	Waiting	<u>Av</u>	<u>Av</u>	<u>Av</u>	<u>Av</u>			Waiting	Waiting	Waiting
Center 3	Waiting	<u>Av</u>	<u>Av</u>	<u>Av</u>	<u>Av</u>	Full	Full	Full	Full	Full

- 01.12 If the "Accept Fees from the beneficiary agency" is checked at the session level, the system should cancel the payment step of test registration.
- 01.13 The system should display the candidate Balance to the candidate if he/she selects the candidate balance as a payment way.
- 01.14 The candidate Balance should be greater than or equal the Registration Fees.
- 01.15 The system should retrieve the test fees based on the session/Registration status as the following:
  - **Late Registration**: the system should retrieve the late Registration fees.
  - **Early Registration**: the system should retrieve the Early Registration fees.

- **Modify Registration**: the system should retrieve the Registration Modification fees.
- **Re-Registration**: the system should retrieve the Re-registration fees. [this case for the candidate who cancels his/her exam and want to be registered again]
- 01.16 Voucher Code should be at least (xx) digits, and it should accept digits only.
- 01.17 Voucher Amount should be equal or greater than the test fees. If it's greater than the test fees. The change will be added to the candidate balance.
- 01.18 Each Item in the Identity List should have comments to be displayed on the Registration Notice.
- 01.19 If the candidate gender is female, the system should check the following information in the candidate profile page:
  - I have National ID.
  - I have Qiyas Smart Card.
  - 01.19.1 If one of the above options is checked, the system should allow the candidate to complete his/her registration. If not the system should direct the candidate to issue a new Qiyas smart Card.
- 01.20 The system should retrieve the Candidate details from the candidate profile information.
- 01.21 The system should retrieve the Appointment details from the selected appointment.
- 01.22 The system should generate the group number based on the predefined groups for each specialty in the test session information. [Refer to Set Specialties groups use case in Test module SRS document]
- O1.23 The system shouldn't generate a group Number for the candidate with the following registration statuses:
  - Waiting List.
  - Waiting List/Waiting Payment.
- 01.24 Center details should be retrieved from the center information.
- 01.25 Payment status should have one of the following values:
  - Paid. [Payment way]
  - Not Paid.
- 01.26 Session note should be retrieved from the test session information depending on the candidate the test session genders. And the content of the session note should be displayed in the registration notice either they were a free text or an uploaded file.
- 01.27 The system should generates a bar code for the candidate for attendance purposes.[Will be used in the Observer Module]
- 01.28 Registration Status should be one of the following statuses:
  - **Confirmed**: [Appointment confirmed, Paid]
  - Not Confirmed/Waiting Payment: [Appointment Confirmed, not Paid]
  - Waiting List:[Appointment waiting list, Paid]
  - Waiting List/waiting Payment: [Appointment Waiting List, Not Paid]
- 01.29 Identity Notes should be appeared only for the female candidates based on the selected Identity type.
- 01.30 Test Center should be clickable.
- 01.31 If the appointment is "Waiting List", the system should display the Remaining seats on the center when the actor's mouse curser over.
- 01.32 Appointment information should be read only.

- 01.33 "Registration Time" should retrieve the current date and time for the test registration as the following:
  - [Date: HH:MM]
- 01.34 Seat number should be created by the system and only it should be on the actual center capacity only and for the following registration statuses:
  - Confirmed: [Appointment confirmed, Paid]
  - Not Confirmed/Waiting Payment:[Appointment Confirmed, not Paid]

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - The candidate should be registered for the exam successfully.
  - Test details should be published to the candidate dashboard successfully.
  - the status of the test registration should be one of the following values:
    - Confirmed: [Appointment confirmed, Paid]
    - Not Confirmed/Waiting Payment:[Appointment Confirmed, not Paid]
    - Waiting List: [Appointment waiting list, Paid]
    - Waiting List/waiting Payment: [Appointment Waiting List, Not Paid]
  - The actor should have the options to take one of the following actions:
    - Cancel Test Registration. [UC 01 -05-09] [Cancel Test Registration]
    - Pay test registration. [UC 01 -05-07] [Pay Test Registration]
    - Modify Test Registration. [UC 01 -05-08] [Modify Test Registration]

# 3.2 [UC 01 -05-02] - [Search for test center]

## Actors

The actor of this use case will be a public user with role "Candidate".

## **Description**

During the test registration, the candidates may search for a test center to facilitate the selection of the test appointment. The main objective of this use case is describing the business of "Search Test Centers" by providing valuable filtration criteria for the candidate.

## Trigger

From the Candidate Test Registration Page, the actor selects to search for a test center.

#### **Pre-Conditions**

- 1. The actor should be in "Candidate Test Registration" Page.
- 2. The actor should be in the second step of test registration "Select Appointment".

- O2.1 The system prompts the user to fill the test centers search filtration criteria; which are the following:
  - Region. [BR 02.1]
  - City. [BR 02.2]
  - Center Name. [BR 02.3]
- 02.2 The actor fills in the test centers search filtration criteria; which are the following:
  - Region.
  - City.
  - Center Name.
- 02.3 The actor selects to search for a test center based on the selected filtration criteria.
- 02.4 The system restricts the appointments grid based on the selected filtration criteria.

N/A

#### **Business Rules**

- "Region" list should retrieve all regions for all selected test centers in the test schedule.

  [Refer to Create Test Schedule Use Case]
- "Cities", should be filtered based on the selected Region and it should retrieve only the cities of the selected test centers in the test schedule.
- 02.3 "Center Name" list should be filtered on the selected City and it should retrieve only the assigned centers

### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - The system should restrict the appointments grid based on the selected filtration criteria.

## 3.3 [UC 01 -05-03] - [View Center Details]

## **Actors**

The actor of this use case will be a public user with role "Candidate".

## **Description**

The main objective of this use case is to view the test center details as read only information to the candidate during the test registration process.

## Trigger

From the Candidate Test Registration Page, the actor selects to view Center Details.

#### **Pre-Conditions**

- 1. The actor should be in "Candidate Test Registration" Page.
- 2. The actor should be in the second step of test registration "Select Appointment".

#### **Normal Flow**

- 03.1 The actor clicks on the test center name.
- 03.2 The system displays a pop-up screen to the candidate and displays the center details; which are the following: [BR 03.1]
- Center Name.
- Region.
- City.
- Center Address.
- Google Earth Link. [BR 03.2]
- Center Images. [BR 03.3]
- Center Map. [BR 03.4]

## **Alternative Flow**

## N/A

## **Business Rule**

- 03.1 Center information should be displayed as read only information.
- 03.2 Google Earth Link should direct the user in the center location on Google Maps in a new page.
- 03.3 Center Images should be appeared as thumbnail Images and the actor should be able to enlarge the Image to be displayed in the real size.
- 03.4 Center map should be appeared as thumbnail Images and the actor should be able to enlarge the Image to be displayed in the real size.

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - o Center information should be displayed to the user.

# 3.4 **[UC 01 -05-04] – [Print Registration Notice]**

#### Actors

The actor of this use case will be a public user with role "Candidate".

## **Description**

The main objective of this use case is to print the candidate registration notice to be used on the test day for attendance purposes.

## Trigger

From the candidate registration notice page, the actor selects to print the "Registration notice"

## **Pre-Conditions**

- 1. The actor should be logged in. [UC 01-07-05] [Log In Candidate]
- 2. The actor should be either:
  - a. Is the last step of test registration "Registration Notice"
  - b. In View test details. [UC 01 -05-11] [View Test Details by Candidate]

- 04.1 The actor selects to print the registration notice.
- O4.2 The system directs the user to the report viewer and display the registration notice information which are the following: [BR 04.1]
  - Candidate Details:
    - Full Name.
    - National ID.
    - Registration Number.
  - Appointment Details:
    - Day.
    - Date.
    - Period.
    - Specialty.
  - Group Details
    - Group Number.
  - Center Details
    - Region.
    - City.
    - Center Name.
  - Payment details:
    - Payment Status.
  - Session Notes.
  - Bar Code.
  - Registration Status.
  - Identity Notes.

- 04.3 The system prompts the user to print the registration notice.
- 04.4 The actor selects to print the registration notice.
- 04.5 The system prints-out the registration notice. [A 04.1]

04.1 In case there is no defined printer on the actor's machine, the system couldn't print the registration notice to the candidate.

#### **Business Rule**

## 04.1 The report format should be defined.

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - o Registration Notice should be printed successfully.

# 3.5 [UC 01 -05-05] - [Charge Candidate Balance]

## **Actors**

The actor of this use case will be a public user with role "Candidate".

# **Description**

The main objective of this use case is to charge the account balance for the candidate. The actor of this use case has to select the charge way from the available channels.

## Trigger

- 1. From the candidate Test Registration page "Payment step", the actor selects to charge his/her account.
- 2. From the candidate home page, the actor selects to charge his/her account.

## **Pre-Conditions**

- 1. The actor should be logged in. [UC 01-07-05] [Log In Candidate]
- 2. The actor should be either:
  - a. In the test registration page "payment step"
  - b. In candidate Home page.

- 05.1 The actor selects to charge his/her account.
- The system directs the user to the charge account page and prompts him/her to select the charging channel from the charging ways list; which are the following:
- By Using Voucher.
- BY Using SADAD.
- BY Using Credit Card.
  - 05.3 The selects the charge channel from the charging channels list; which are the following:
- By Using Voucher
- By Using SADAD. [SUB 05.1]
- By Using Credit Card. [SUB 05.2]
  - 05.4 The actor selects By Using Voucher.
  - 05.5 The system prompts the user to fill the Voucher Code. [BR 05.1]
  - 05.6 The actor fills the Voucher Code. [A 05.1]
  - 05.7 The actor selects charge balance.
  - 05.8 The system checks the Voucher Code.
  - 05.9 The system charges the candidate balance with the voucher value.
  - O5.10 The system displays the following confirmation message to the user "Your Account Balance has been charged successfully by XXX Riyals". [BR 05.2]

O5.1 In case the Voucher Code is not valid, the system should display the following error message "Invalid Voucher Number".

05.2

## **Sub Flow**

- 05.1 In case the actor selects "By Using SADAD".
- 05.2 In case the actor selects "By Using Voucher"

## **Business Rules**

- 05.1 Voucher Code format.
- 05.2 XXX is the voucher Value.

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - Registration Notice should be printed successfully.

# 3.6 [UC 01 -05-06] - [Register in more than one appointment]

## Actors

The actor of this use case will be a public user with role "Candidate".

## **Description**

The main objective of this use case is to force the candidate to be registered in two appointments that have been defined in the test schedule by adding more than section/sub specialty for the main specialty.

## Trigger

From the test registration page "Payment step", the system directs the actor to select the second appointment.

## **Pre-Conditions**

- The actor should be in the test registration page. [UC 01 -05-01] [Register Candidate for Test]
- 2. The actor should be finished from the "Payment step".
- 3. "Force candidate to be registered in more than one appointment" should be checked in the test session information.

#### **Normal Flow**

- 06.1 The system directs the user to appointments grid and display the following message to the user "Please select the second appointment which is "Specialty Name" as it required".[A 06.1]
- 06.2 The system prompts the user to select the second appointment.
- 06.3 The actor selects the second appointment from the appointments grid.
- 06.4 The actor completes his test registration for the second appointment. [BR 06.1]

## **Alternative Flow**

- 06.1 In case the second appointment is conducted before by the candidate, the system should display the following message to the user "you have passed the second required exam before [Specialty Name] with grade [Grade], would you like to register in the exam again".
  - 06.1.1 The actor selects not to register to the exam again. [A 06.2]
  - 06.1.2 The system directs the user to final step of test registration [refer to [UC 01 -05-01] [Register Candidate for Test] step 01.23]
- 06.2 In case the actor selects to register to the second exam again [N 06.2]

## **Business Rules**

O6.1 All business rules/ Alternative flow for the use case [UC 01-05.01]-[Candidate Test Registration] should be applied for the second appointment.

## **Post Conditions**

- Fail: An error message to be displayed to the candidate.
- Success:
  - The system should display two separate registration notice for the candidate.
  - the status for each appointments of the test registration should be one of the following values:
    - Confirmed: [Appointment confirmed, Paid]
    - Not Confirmed/Waiting Payment: [Appointment Confirmed, not Paid]
    - Waiting List:[Appointment waiting list, Paid]
    - Waiting List/waiting Payment: [Appointment Waiting List, Not Paid]
  - The actor should have the options to take one of the following actions:
    - Cancel Test Registration. [UC 01 -05-09] [Cancel Test Registration]
    - Pay test registration. [UC 01 -05-07] [Pay Test Registration]
    - Modify Test Registration. [UC 01 -05-08] [Modify Test Registration]
  - The system should publish the two appointments on the candidate dashboard as separate appointments. [Dashboard details is pending on Qiyas]

# 3.7 [UC 01 -05-07] - [Pay Test Registration]

#### **Actors**

The actor of this use case will be a public user with role "Candidate".

## **Description**

The main goal of this use case is describing the business of the test payment. The actor of this use case has the option to pay for the unpaid tests through the candidate dashboard.

### Trigger

From the candidate dashboard, the actor selects to pay for a test.

## **Pre-Conditions**

- 1. The actor should be logged in to the registration system. [UC 01 -07-04] [Log in Candidate]
- 2. There is at least one registered test in the candidate dashboard with the one of the following statues:
  - a. Not Confirmed/waiting payment.
  - b. Waiting list/Waiting payment.

- 07.1 The actor selects a test from the candidate dashboard and selects to pay.
- 07.2 The system directs the candidate to the next step of test registration which is "Payment" and prompts him/her to select a payment way from the payment options; which are the following: [A 07.1]
  - Candidate Balance. [BR 07.01] [BR 07.02]
  - Visa Credit Card.

- Voucher.
- SADAD.
- 07.3 The system displays the test fees to the user [BR 07.3]
- 07.4 The actor may charge his balance before selecting the payment way. **[UC 01-05-05] [Charge Candidate Balance]**
- **07.5** The candidate selects the payment way from the payment options; which are the following: [A 07.3][A 07.4] [A 07.5]
  - Candidate Balance.[A 07.2]
  - Visa Credit Card. [SUB 07.1]
  - Voucher. [SUB 07.2]
  - SADAD. **[SUB 07.3]**
- 07.6 The system deducts the registration fees from the candidate's balance. [SUB 07.4]
- 07.7 The system displays the following message to the user "Paid successfully".
- 07.8 The system updates the test registration status for the candidate on the dashboard.
- 07.9 The system directs the user to the registration system home page.

- 07.1 In case the "Accept fees from Beneficiary agency" is checked at the session level, the system should direct the user to the final step of Registration which is "Registration Notice".
- 07.2 In case the candidate balance is less than the registration fees, the system should display the following error message "Your balance is less than the test fee, please charge your balance"
- 07.3 In case the actor selects "Pay later", the system should move the actor to the final step of test registration which is "Registration Notice".
- O7.4 In case the session status is "Early Registration" and the actor selects to pay later and the "Activate registration cancelation for early non-paid registration" is checked in the session information, the system should display the following warning message to the user "If you don't pay for the test during (XX) hours, the system will cancel your registration" and the (XX hours) value will be retrieved from the "Grace period of Early Payment" from the session information. Then the system should move the actor to the final step of test registration.
- 07.5 In case the session status is "Late Registration" and the actor selects to pay later and the "Activate registration cancelation for Late non-paid registration" is checked in the session information, the system should display the following warning message to the user "If you don't pay for the test during (XX) hours, the system will cancel your registration" and the (XX hours) value will be retrieved from the "Grace period of Late Payment" from the session information. Then the system should move the actor to the final step of test registration.
- 07.6 In case the Voucher Code is wrong, the system should display the following error message "Invalid Voucher Code".
- 07.7 In case the Voucher Value is less than the registration fees, the system should display the following error message to the candidate "Voucher Value is not enough".

- 07.1 In case the actor selects Visa Credit Card [Pending]
- 07.2 In case the actor selects Voucher, the system prompts the user to enter the following:
  - Voucher Code.[BR 07.4] [BR 07.5]
  - 07.2.1 The actor fills the Voucher information which is the following:
    - Voucher Code
  - 07.2.2 The actor selects to pay for test.
  - 07.2.3 The system checks the entered voucher Code. [A 07.6] [A 07.7]
  - 07.2.4 The system deducts the registration fees from the entered voucher code.
  - 07.2.5 The system displays the following message to the user "Paid successfully"
  - 07.2.6 The system moves the actor to the final step of test registration which is "Registration Notice".
- 07.3 In case the actor selects "SADAD" [Pending]
- 07.4 In case the actor registered his/her exam in the early registration time and pay for the exam in the late registration time the system should add the difference between the early registration fees and the late registration fees to the deducted registration fees

#### **Business Rules**

- 07.1 The system should display the candidate Balance to the candidate if he/she selects the candidate balance as a payment way.
- 07.2 The candidate Balance should be greater than or equal the Registration Fees.
- 07.3 The system should retrieve the test fees based on the session/Registration status as the following:
  - Late Registration: the system should retrieve the late Registration fees.
  - **Early Registration**: the system should retrieve the Early Registration fees.
  - **Modify Registration**: the system should retrieve the Registration Modification fees.
  - **Re-Registration**: the system should retrieve the Re-registration fees. [this case for the candidate who cancels his/her exam and want to be registered again]
- 07.4 Voucher Code should be at least (xx) digits, and it should accept digits only.
- 07.5 Voucher Amount should be equal or greater than the test fees. If it's greater than the test fees. The change will be added to the candidate balance.

## **Post Conditions**

- Fail: An error message to be displayed to the candidate.
- Success:
  - The system should update the registration status for the test based on the test registration to be either:
    - Confirmed.
    - Waiting List.
  - The actor should have the option to take one of the following actions:

•

# 3.8 [UC 01 -05-08] - [Modify Test Registration]

#### **Actors**

The actor of this use case will be a public user with role "Candidate".

## **Description**

The main objective of this use case is to change the registered appointment by other appointment. The actor of this use case should select the registered appointment and requests to modify the test registration.

## Trigger

From the candidate dashboard, the actor selects to modify test registration.

#### **Pre-Conditions**

- 1. The actor should be logged in to the registration system. [UC 01 -07-04] [Log in Candidate]
- 2. The actor should be in Registration system home page.
- 3. "Enable Registration Modification" should be checked in the test session.
- 4. "Current Date" should be less than the "Appointment date".

- 08.1 The actor selects a registered test from the candidate dashboard and requests to modify test registration. [BR 08.35] [BR 08.36]
- 08.2 The system directs the user to available test page and displays the available tests grid to the candidate with the following details: [A 08.13] [A 08.14]
  - Session Name. [BR 08.1] [BR 08.2]
  - Session Status. [BR 08.3]
- 08.3 The system prompts the user to select a test session from the available tests grid. [BR 08.4] [BR 08.5]
- 08.4 The actor selects a test session from the available tests grid and request to register.
- 08.5 The system directs the user to the candidate test registration page.
- 08.6 The system directs the user to the first step of the test registration which is "Registration Instructions" and display the following information to the user: [A 08.1] [A 08.3]
  - Registration Instructions. [BR 08.6]
- 08.7 The system prompts the user to accept the registration instruction by filling the following filed:
  - I Agree on the Registration Instructions.
- 08.8 The actor fills the first step of the test registration information which is the following:
  - I Agree on the Registration Instructions. [A 08.2]
- 08.9 The actor selects to move to the next step of the Test Registration which is "Select Appointment".

- 08.10 The system directs the user to the next step of test registration and displays the appointments grid to the candidate with the following details: [BR 08.7] [BR 08.8] [BR 08.10]
  - Day(s).
  - Period(s).
  - Specialty(s).
  - Test Centers(s). [BR 01.30] [UC 01 -05-03] [View Center Details].
  - Appointments. [BR 08.9] [BR 08.31]
- 08.11 The system prompts the user to select one appointment from the appointments grid.[BR 08.11]
- 08.12 The actor may search for a certain center. [UC 01 -05-02] [Search for test center].
- 08.13 The actor may select to view center details. [UC 01 -05-03] [View Center Details].
- 08.14 The actor selects an appointment to be registered. [BR 08.12]
- 08.15 The system displays the selected appointment details the user with the following confirmation message "your selected appointment details are the following": [BR 08.32]
  - Session Name.
  - Day.
  - Period.
  - Test Center Name.
- 08.16 The actor selects to move to the next step of test registration "Payment" [BR 08.33] [BR 08.34]
- 08.17 The system moves the candidate to the next step of test registration which is "Payment" and prompts him/her to select a payment way from the payment options; which are the following: [A 08.4] [A 08.15] [A 08.16]
  - Candidate Balance. [BR 08.13] [BR 08.14]
  - SADAD.
  - Credit Card.
  - "بطاقات الراجحي" .Vouchers -
- 08.18 The system displays the test fees to the user [BR 08.15]
- 08.19 The actor may charge his balance before selecting the payment way. [UC 01-05-05] [Charge Candidate Balance]
- 08.20 The candidate selects the payment way from the payment options; which are the following: [A 08.6][A 08.7] [A 08.8]
  - Candidate Balance.[A 08.5]
  - SADAD. [SUB 08.3]
  - Visa Credit Card. [SUB 08.1]
  - Vouchers. [SUB 08.2]
- 08.21 The system deducts the registration fees from the candidate's balance.
- 08.22 The system displays the following message to the user "Paid successfully".
- 08.23 The system moves the actor to the final step of the test registration which is "Registration Notice" and displays the following information to the candidate.[BR 08.19]
  [A 08.11] [A 08.12]
  - Candidate Details: [BR 08.20]
    - Full Name.
    - National ID.
    - Registration Number.

- Appointment Details: [BR 08.21]
  - Day.
  - Date.
  - Period.
  - Specialty.
- Group Details
  - Group Number. [BR 08.22] [BR 08.23]
- Center Details [BR 08.24]
  - Region.
  - City.
  - Center Name.
- Payment details:
  - Payment Status. [BR 08.25]
- Session Notes. [BR 08.26]
- Bar Code. [BR 08.27]
- Registration Status. [BR 08.28]
- Identity Notes. [BR 08.29]
- Registration time [BR 08.37]
- Seat Number. [BR 08.38]
- 08.24 The actor may print the Registration notice. [UC 01 -05-04] [Print Registration Notice].
- 08.25 The actor selects to finish the test Registration.
- 08.26 The system publishes the new test registration on the candidate dashboard with the following details:
  - [Details pending on Qiyas]
- 08.27 The system cancels the previous test registration.
- 08.28 The system moves the previous test registration to the canceled test list on the candidate dashboard.
- 08.29 The system sets the status of the previous registration test as "Canceled by the candidate"
- 08.30 The system sets the reason of cancelation as "Modify appointment"
- 08.31 The system directs the candidate to public site home page.

- 08.1 In case the actor has a registered test for the same test session with registration status "Confirmed", "Not Confirmed/waiting payment" the system should display the following error message "You already have a registered test for the selected test session".
- 08.2 In case the "I Agree on Registration Instructions" is not checked, the system should displayed the following error message "You have to accept the registration instructions to move to the next step".
- 08.3 In case the result of the beneficiary agency is false, the system shouldn't allow the user to continue his test registration and display an error message to the user [Message content]
- 08.4 In case the "Accept fees from Beneficiary agency" is checked at the session level, the system should direct the user to the final step of Registration which is "Registration Notice".

- 08.5 In case the candidate balance is less than the registration fees, the system should display the following error message "Your balance is less than the test fee, please charge your balance".
- 08.6 In case the actor selects "Pay later", the system should move the actor to the final step of test registration which is "Registration Notice" and set the registration status based on the test registration as either:
  - Not Confirmed/Waiting payment.
  - Waiting List/Waiting Payment.
- O8.7 In case the session status is "Early Registration" and the actor selects to pay later and the "Activate registration cancelation for early non-paid registration" is checked in the session information, the system should display the following warning message to the user "If you don't pay for the test during (XX) hours, the system will cancel your registration" and the (XX hours) value will be retrieved from the "Grace period of Early Payment" from the session information. Then the system should move the actor to the final step of test registration.
- O8.8 In case the session status is "Late Registration" and the actor selects to pay later and the "Activate registration cancelation for Late non-paid registration" is checked in the session information, the system should display the following warning message to the user "If you don't pay for the test during (XX) hours, the system will cancel your registration" and the (XX hours) value will be retrieved from the "Grace period of Late Payment" from the session information. Then the system should move the actor to the final step of test registration.
- 08.9 In case the Voucher Code is wrong, the system should display the following error message "Invalid Voucher Code".
- 08.10 In case the Voucher Value is less than the registration fees, the system should display the following error message to the candidate "Voucher Value is not enough".
- 08.11 In case the Candidate is female and she doesn't have a national ID or Qiyas Smart Card, the system should prompt the candidate to select an appointment to issue Qiyas smart.
  - 08.11.1 [Pending Appointment details till the ID creation module SRS being finished]

08.11.2 ......

- 08.12 In case the "Identification Verification" is checked in the test session information and the candidate is female, the system should prompts the candidate to select the Identity type for attending the test from the following list: [BR 01.18]
  - National ID.
  - Separate Passport.
  - University ID card with Photo.
  - Qiyas Smart Card.
  - بطاقة دخول الاختبار -
  - 08.12.1 The candidate selects one Identity type from the Identity types; which are the following:
    - National ID.
    - Separate Passport.
    - University ID card with Photo.
    - Qivas Smart Card.
    - بطاقة دخول الاختبار -

- 08.12.2 The actor selects to complete her test registration.
- 08.12.3 The system returns the user to the final test registration step which is "Registration Notice"
- 08.13 In case the current date is greater than or equal the appointment date and the status of the previous registration is "Confirmed" or "Not confirmed/waiting payment" the system should display the following error message to the user "You can't modify your registration"
- 08.14—In case the "Enable Registration modification" is not checked and the status of the previous appointment is "Confirmed" or "Not confirmed/Waiting Payment", the system should display the following error message "You can't modify your registration".
- 08.15 In case the previous test registration status is "Waiting list", the system should skip the payment step.
- 08.16 In case the previous test registration status is "Waiting list/waiting payment", the system should deduct either: (Based on the test registration date)
  - Early Registration fee.
  - Late Registration Fee.

## **Sub Flow**

- 08.1 In case the actor selects Visa Credit Card [Pending]
- 08.2 In case the actor selects Voucher, the system prompts the user to enter the following:
  - Voucher Code.[BR 01.16] [BR 01.17]
  - 08.2.1 The actor fills the Voucher information which is the following:
    - Voucher Code
  - 08.2.2 The actor selects to pay for test.
  - 08.2.3 The system checks the entered voucher Code. [A 01.9] [A 01.10]
  - 08.2.4 The system deducts the registration fees from the entered voucher code.
  - 08.2.5 The system displays the following message to the user "Paid successfully"
  - 08.2.6 The system moves the actor to the final step of test registration which is "Registration Notice".
- 08.3 In case the actor selects "SADAD" [Pending]

## **Business Rule**

- 08.1 Session Name format should be as the following:
  - (Test Name MM YY) Where:
    - **■** Test Name: Test Name in the template details.
    - **■** MM: Month of the start Registration Date
    - **▼** YY: Year of the Start Registration Date
- 08.2 The actor should be able to view the test sessions based on the following rules:

### - For the candidate:

- Account Type: should match the selected account type in the Test Template.
- Account Type Level1: should match the selected account type in the Test Template.

- Account Type Level2 : should match the selected account type in the Test
   Template (If it is selected at the template level)
- Date of Birth: should match the selected date of birth in the test template (If it is selected at the template level)

## And, Test Session:

- Session Gender should match the Candidate Gender.

## - And, Test Center:

- Center Gender should match the Candidate Gender.
- Otherwise, if the above details are not matched with the candidate details, the candidate shouldn't be able to view the test session.
- 08.3 Session Status should be one of the following:
  - Early Registration: Late Registration date is not due.
  - **Late Registration**. Late Registration Date is due.
- 08.4 The actor shouldn't be able to register for a test if he/she has a test registration for the selected session with registration status "Confirmed" or "Not confirmed/waiting payment". But if he/she has a test registration for the selected session with registration status "Confirmed/ waiting List", "Waiting list/waiting payment", or "Canceled", the system should allow registration. The system should allow registration.
- 08.5 If the test selected test session is associated with the beneficiary agency and the "Check beneficiary agency" field is checked at the session level the system should check the candidate with the beneficiary agency based on the selected service at the session level.

  [Refer to the integration with the beneficiary agency].
- 08.6 Registration Instructions should be displayed based on the selected test session since each test session has its own instructions.
- 08.7 The system should display the appointments grid based on the selected test session. Each test session should be scheduled in order to be displayed on the appointments grid.
- 08.8 All Appointments should be appeared as it scheduled before by the Registration Admin [Refer to Test schedule use cases].
- 08.9 Appointments should be displayed as the following:
  - Available. [To be appeared in Green ]
  - **Waiting List**. [to be appeared in Orange]
  - Blocked. [to be appeared in Gray without the caption "Blocked"]
  - **Unavailable**. [To be Appeared in Black without the caption "Unavailable"]
  - Full. [to be appeared in Red]
- 08.10 The actor should be able to select only either:
  - Available Appointment.
  - Waiting List Appointment.
- 08.11 The following is the Appointments grid (For Clarification purposes)

Day			Day 1	(Date)	Day 2 (date)					
Center	Period 1		Period 2		Period 3		Period 1		Period 2	
Center 1					<u>Av</u>		<u>Av</u>	<u>Av</u>		<u>Av</u>
Center 2	Waiting	<u>Av</u>	<u>Av</u>	<u>Av</u>	<u>Av</u>			Waiting	Waiting	Waiting
Center 3	Waiting	<u>Av</u>	<u>Av</u>	<u>Av</u>	<u>Av</u>	Full	Full	Full	Full	Full

- 08.12 If the "Accept Fees from the beneficiary agency" is checked at the session level, the system should cancel the payment step of test registration.
- 08.13 The system should display the candidate Balance to the candidate if he/she selects the candidate balance as a payment way.
- 08.14 The candidate Balance should be greater than or equal the Registration Fees.
- 08.15 If the status of the previous registration is "Confirmed" The system should retrieve either (Based on registration time)
  - Early modification fees.
  - Late modification fees.
- 08.16 Voucher Code should be at least (xx) digits, and it should accept digits only.
- 08.17 Voucher Amount should be equal or greater than the test fees. If it's greater than the test fees. The change will be added to the candidate balance.
- 08.18 Each Item in the Identity List should have comments to be displayed on the Registration Notice.
- 08.19 If the candidate gender is female, the system should check the following information in the candidate profile page:
  - I have National ID.
  - I have Qiyas Smart Card.
  - 08.19.1 If one of the above options is checked, the system should allow the candidate to complete his/her registration. If not the system should direct the candidate to issue a new Qiyas smart Card.
- 08.20 The system should retrieve the Candidate details from the candidate profile information.
- 08.21 The system should retrieve the Appointment details from the selected appointment.
- 08.22 The system should generate the group number based on the predefined groups for each specialty in the test session information. [Refer to Set Specialties groups use case in Test module SRS document]
- 08.23 The system shouldn't generate a group Number for the candidate with the following registration statuses:
  - Waiting List.
  - Waiting List/Waiting Payment.
- 08.24 Center details should be retrieved from the center information.
- 08.25 Payment status should have one of the following values:
  - Paid. [Payment way]
  - Not Paid.
- 08.26 Session note should be retrieved from the test session information depending on the candidate the test session genders. And the content of the session note should be displayed in the registration notice either they were a free text or an uploaded file.
- 08.27 The system should generates a bar code for the candidate for attendance purposes.[Will be used in the Observer Module]
- 08.28 Registration Status should be one of the following statuses:
  - Confirmed: [Appointment confirmed, Paid]
  - Not Confirmed/Waiting Payment: [Appointment Confirmed, not Paid]
  - Waiting List:[Appointment waiting list, Paid]
  - Waiting List/waiting Payment: [Appointment Waiting List, Not Paid]
- 08.29 Identity Notes should be appeared only for the female candidates based on the selected Identity type.

- 08.30 Test Center should be clickable.
- 08.31 If the appointment is "Waiting List", the system should display the Remaining seats on the center when the actor's mouse curser over.
- 08.32 Appointment information should be read only.
- 08.33 If the previous registration status is "Waiting list", the system should skip the payment step.
- 08.34 If the previous test registration status is "Waiting List/waiting payment", the system should retrieve the either: (Based on the test registration date)
  - Early Registration fee.
  - Late Registration Fee.
- 08.35 "Enable Registration Modification" should be checked in the test session. This business rule to allow registration modification for the registered test with status "Confirmed" or "Not Confirmed/waiting payment" only. And the user should be able to modify the test registration for other statues without enabling test registration modification in the test session.
- 08.36 The system should allow the user to modify his/her test registration if the test registration status is "Confirmed/ waiting list" or "Waiting List/Waiting Payment" regardless the current date.
- 08.37 "Registration Time" should retrieve the current date and time for the test registration as the following:

## [Date: HH:MM]

- 08.38 Seat number should be created by the system and only it should be on the actual center capacity only and for the following registration statuses:
  - Confirmed: [Appointment confirmed, Paid]
  - Not Confirmed/Waiting Payment: [Appointment Confirmed, not Paid]

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - Test registration should be changed successfully.
  - The system sets the status of the previous test registration as "Canceled by Candidate"
  - o the status of the test registration should be one of the following values:
    - Confirmed: [Appointment confirmed, Paid]
    - Not Confirmed/Waiting Payment: [Appointment Confirmed, not Paid]
    - Waiting List:[Appointment waiting list, Paid]
    - Waiting List/waiting Payment: [Appointment Waiting List, Not Paid]
  - The actor should have the options to take one of the following actions:
    - Cancel Test Registration. [UC 01 -05-09] [Cancel Test Registration]
    - Pay test registration. [UC 01 -05-07] [Pay Test Registration]
    - Modify Test Registration. [UC 01 -05-08] [Modify Test Registration]

# 3.9 [UC 01 -05-09] - [Cancel Test Registration]

#### **Actors**

The actor of this use case will be a public user with role "Candidate".

## **Description**

The main objective of this use case is to cancel the test registration for the candidate. The actor of this use case has to select a registered test from the registered tests list in the dashboard and request to cancel his/her Registration.

## Trigger

From the candidate dashboard, the actor selects to cancel test registration.

### **Pre-Conditions**

- 1. The actor should be logged in to the registration system. [UC 01 -07-04] [Log in Candidate]
- 2. The actor should be in Registration system home page.
- 3. "Enable Registration cancelation" should be checked in the test session.
- 4. "Current Date" should be less than the "Appointment date".

## **Normal Flow**

- O9.1 The actor selects a registered test from the candidate dashboard and requests to cancel test registration. [BR 09.1] [BR 09.2] [BR 09.3] [BR 09.4] [BR 09.5]
- O9.2 The system displays the following confirmation message to the user "Are you sure you want cancel your registration". [A 09.1] [A 09.2]
- 09.3 The actor confirms the confirmation message. [A 09.3]
- 09.4 The system cancels the test registration.
- 09.5 The system moves the test registration to the canceled test list on the candidate dashboard.
- 09.6 The system sets the status of the previous registration test as "Canceled by the candidate"
- 09.7 The system sets the reason of cancelation as "canceled appointment". [BR 09.6]
- 09.8 The system directs the candidate to public site home page.

## **Alternative Flow**

- 09.1 In case the "Enable Registration cancelation" is not checked and the status of the previous appointment is "Confirmed" or "Not confirmed/Waiting Payment", the system should display the following error message "You can't cancel your registration".
- 09.2 In case the current date is greater than or equal the appointment date and the registration status is "Confirmed" or "Not Confirmed/waiting payment" the system should display the following error message "You can't cancel your registration".

09.3 In case the actor cancels the confirmation message, the system should return the user to the candidate dashboard with no actions.

#### **Business Rules**

- 09.1 Current Date should be less than the Appointment date.
- 09.2 "Enable Registration cancelation" should be checked in the test session.
- 09.3 If the status of the appointment is "Waiting List" or "Confirmed" the system should refund the paid fees to the candidate balance.
- 09.4 "Enable Registration cancelation" should be checked in the test session. This business rule to allow registration cancelation for the registered test with status "Confirmed" or "Not Confirmed/waiting payment" only. And the user should be able to cancel the test registration for other statues without enabling test registration cancelation in the test session.
- 09.5 The system should allow the user to cancel his/her test registration if the test registration status is "Confirmed/ waiting list" or "Waiting List/Waiting Payment" regardless the current date.
- 09.6 The system should accept the first (based on the registration time (Date :HH MM) candidate who registered as a waiting list (If Any) for the selected appointment and sets the registration status for him/her as the following:
  - If the previous registration status is "Waiting List" the system should set the new registration status as "Confirmed".
  - If the previous registration status is "Waiting List/waiting payment" the system should set the new registration status as "not confirmed/waiting payment"

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - Test registration should be canceled successfully.
  - The actor should have the option to take the following action:
    - Pay test Registration [UC 01 -05-07] [Pay Test Registration]

## 3.10 [UC 01 -05-10] - [Cancel session Registration by Admin]

## **Actors**

The actor of this use case will be an internal user with role "Registration Admin"

# **Description**

The main Objective of this use case is to cancel the test registration for a certain appointment(s). The actor of this use case has to select a test cycle/session and request to cancel test registration for its appointment(s).

### Trigger

From the internal site home page, the actor selects to cancel test registration.

#### **Pre-Conditions**

- 1. The actor should be logged in.
- 2. The actor should be on the internal site home page.

#### **Normal Flow**

- 10.1 The actor selects "Cancel Test Registration" from the test menu.
- 10.2 The system directs the user to the Cancel test registration page and prompts the user to select the test information; which are the following:
  - Cycle Year.
  - Template Name. [BR 10.1]
  - Session Name. [BR 10.2]
- 10.3 The actor selects the test information; which are the following:
  - Cycle Year.
  - Template Name.
  - Session Name.
- 10.4 The actor selects to cancel all registration on the selected test session.
- 10.5 The system displays the following confirmation message to the user "Are you sure you want to cancel all registrations on the selected test session". [A 10.1]
- 10.6 The actor confirms the confirmation message. [A 10.2]
- 10.7 The system cancels all test registrations on the selected test session.
- 10.8 The system moves all test registration for the selected session to the canceled tests on the candidate dashboard.
- 10.9 The system sets the status for each test registration of the selected test session as "Canceled".
- 10.10 The system sets the reason of cancelation as "Canceled by Admin" on the candidate dashboard in the canceled tests list.
- 10.11 The system directs the user the internal site home page.

## **Alternative Flow**

- 10.1 In case not all mandatory fields are filled, the system should display the following error message to the user "Please fill all mandatory fields".
- 10.2 In case the actor cancels the confirmation message, the system should return the user to the cancel test registration page with no actions.

## **Business Rules**

- 10.1 The system should filter the test template based on the selected cycle year.
- 10.2 The system should filter the test sessions based on the selected test template.

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - o All test registrations should be canceled for the selected test session.
  - The system moves all test registration for the selected session to the canceled tests on the candidate dashboard.
  - The system sets the status for each test registration of the selected test session as "Canceled".
  - The system sets the reason of cancelation as "Canceled by Admin" on the candidate dashboard in the canceled tests list.

# 3.11 [UC 01 -05-11] - [View Test Details by Candidate]

## **Actors**

The actor of this use case will be a public user with role "Candidate".

## **Description**

The main objective of this use case is to view the registered test details by the candidate. The actor of this use case selects one of the registered test from the dashboard and then requests to view its details.

## Trigger

From the candidate dashboard, the actor selects to view the test details.

## **Pre-Conditions**

- 1. The actor should be logged in. [UC 01 -06-04] [Log in Candidate]
- 2. The actor should be on the public site home page.
- 3. There is at least one registered test in the candidate dashboard.

- 11.1 The actor selects one of the registered tests and requests to view its details.
- 11.2 The system directs the user to "view test details" page and displays the test details to the user which are the following: [BR 11.1]
  - Candidate Details:
    - .0 Full Name.
    - .1 National ID.
    - .2 Registration Number.
  - Appointment Details:
    - .0 Day.

- .1 Date.
- .2 Period.
- .3 Specialty.
- Group Details
  - .0 Group Number.
- Center Details
  - .0 Region.
  - .1 City.
  - .2 Center Name.
- Payment details:
  - .0 Payment Status.
- Session Notes.
- Bar Code.
- Registration Status.
- Identity Notes.

N/A

## **Business Rules**

11.1 Test Details should be appeared as read only.

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - o Test Details should be displayed to the candidate.
  - The candidate should have the options to take the following action:
    - Print Registration Notice. [UC 01 -05-04] [Print Registration Notice]

# 3.12 [UC 01 -05-12] - [Transfer Candidates]

## **Actors**

The actor of this use case will be an internal user with role "Registration Admin"

## **Description**

The main objective of this use case is to move candidates from appointment to another appointment. The actor of this use case has to select an appointment and request to move all/separate registered candidates to another appointment.

## Trigger

From the internal site home page, the actor selects "Transfer Candidates" within the registration menu.

#### **Pre-Conditions**

- 1. The actor should be logged in. [Reference to login use case for internal users]
- 2. The actor should be in the internal site home page.

- 12.1 The actor selects "Transfer Candidates" from the Registration menu.
- 12.2 The system directs the user to transfer candidates page and prompts him to fill the search filtration criteria; which are the following:
  - Test Cycle Year.
  - Template Name [BR 12.1]
  - Session Name [BR 12.2]
  - Session Number [BR 12.3]
  - Region. [BR 12.15]
  - City [BR 12.4]
  - Center [BR 12.5]
  - Center Code [BR 12.6]
  - Specialty [BR 12.9]
  - Day [BR 12.7] [BR 12.9]
  - Period [BR 12.8] [BR 12.9]
  - Registration Number.
  - Candidate Name.
  - National ID.
- 12.3 The actor fills the search filtration criteria; which are the following:
  - Test Cycle Year.
  - Test Template
  - Test Session Name
  - Session Number
  - Area
  - City
  - Center
  - Center Code
  - Specialty
  - Day
  - Period
  - Registration Number
  - Candidate Name
  - National ID
- 12.4 The actor selects to search for candidates.
- 12.5 The system retrieves all registered candidates based on the entered filtration criteria in the candidates grid with the following details: [BR 12.21]
  - Candidate Name.
  - National ID.
  - Registration Number.

- Day.
- Date.
- Period.
- Specialty.
- 12.6 The system prompts the user to select one transfer mechanism from the transfer mechanisms options; which are the following:
  - Manual. [BR 12.10]
  - First (Candidates Number) candidate. [BR 12.11]
  - Last (Candidates Number) candidates. [BR 12.12]
  - Randomly (Candidates Number) candidates. [BR 12.13]
- 12.7 The actor selects the transfer mechanism from the transfer mechanism; which are the following:
  - Manual.
  - First (Candidates Number) candidate. [SUB 12.1]
  - Last (Candidates Number) candidates. [SUB 12.2]
  - Randomly (Candidates Number) candidates. [SUB 12.3]
- 12.8 The actor may selects the following:
  - Block "Transferred From" Appointments [BR 12.17]
- 12.9 The actor selects separate/all candidates from the candidates' grid by check the candidate.
- 12.10 The actor selects to transfer candidate. [A 12.5]
- 12.11 The system displays a pop-up window to the candidate and prompts him to fill the "Transfer To Center" information; which are the following:
  - Region [BR 12.15]
  - City [BR 12.4]
  - Center [BR 12.5]
  - Center Code [BR 12.6]
  - Specialty [BR 12.9] [BR 12.16] [BR 12.18]
  - Day [BR 12.7] [BR 12.9]
  - Period [BR 12.8] [BR 12.9]
  - Notification message [BR 12.20]
- 12.12 The actor selects the transfer to center information; which are the following:
  - Region
  - City
  - Center
  - Center Code
  - Specialty [A 12.3]
  - Dav
  - Notification message [A 12.5]
- 12.13 The system displays the following information for the selected test center:
  - Center Capacity.
  - Remaining Seats.
- 12.14 The actor may select "Register over Capacity" for the transfer To Center. [BR 12.19]
- 12.15 The actor selects transfer candidates. [A 12.4] [A 12.6]
- 12.16 The system transfers all selected candidates to the new test center.
- 12.17 The system should display the following status message to the user:
  - Number of Registered candidates within the center capacity is XX
  - Number of registered candidate over the center capacity is XX
  - Remaining seats are XX

- 12.18 The system cancels all previous test registration for the selected candidates.
- 12.19 The system sets the status of the previous test registrations as "Canceled"
- 12.20 The system sets the reason of cancelation as "Canceled by admin/transfer to another appointment"
- 12.21 The system adds the new appointments for each candidate at his/her dashboard with the same previous status.
- 12.22 The system directs the user to the internal site home page.

- 12.1 In case the candidate number is greater than the candidates' number in the candidates' grid, the system should display the following error message "candidate number should be within the candidates' number in the grid."
- 12.2 In case there are no candidates selected, the system should display the following error message "At least one candidate should be selected".
- 12.3 In case the specialty is/are not matched the selected specialties in the search filtration criteria, the system should display the following error message "Specialties should be matched".
- 12.4 In case the number of candidates are greater than the remaining seats in the transferred to Center and the "Register over capacity" is not checked, the system should display the following error message ""Number of transferred students shouldn't be more than the remaining seats of the transferred to center".
- 12.5 In case the notification message is empty, the system should display the following error message "Pleas fill the notification message".
- 12.6 In case the actor cancels the operation, the system should direct the user to the internal site home page with no actions.
- 12.7 In case the actor cancels the operation, the system should return the user to the transfer candidate page with no actions.

## Sub Flow

- 12.1 In case the actor selects "First (Candidates Number) candidate", the system prompts the user to fill the Number of candidates. [BR 12.14]
  - 12.1.1 The actor fills the number of candidates. [A 12.1] [A 12.3]
  - 12.1.2 The actor selects to transfer candidates [Go To normal Flow 12.11]
- 12.2 In case the actor selects "Last (Candidates Number) candidate", the system prompts the user to fill the Number of candidates. [BR 12.14]
  - 12.2.1 The actor fills the number of candidates. [A 12.1] [A 12.3]
  - 12.2.2 The actor selects to transfer candidates [Go To normal Flow 12.11]
- 12.3 In case the actor selects "Random (Candidates Number) candidate", the system prompts the user to fill the Number of candidates. [BR 12.14]
  - 12.3.1 The actor fills the number of candidates. [A 12.1] [A 12.3]
  - 12.3.2 The actor selects to transfer candidates [Go To normal Flow 12.11]

## **Business Rules**

12.1 The system should retrieve only used test templates in the selected test cycle.

- 12.2 The system should filter test sessions based on the selected test template.
- 12.3 The system should retrieve the session number based on the selected session name.
- 12.4 The system should filter the cities based on the selected region and they should be within the selected test session schedule.
- 12.5 The system should filter the test centers based on the selected city and they should be within the selected test session schedule.
- 12.6 The system should retrieve the Region, city and Center name if the user entered the center code and vice versa.
- 12.7 The system should retrieve only the selected days in the test session schedule.
- 12.8 The system should retrieve only the selected periods in the test session schedule.
- 12.9 This filed should allow multi selection.
- 12.10 The system should allow the user to selects the candidates from the candidates' grid by checking them separately/all.
- 12.11 This mechanism used to transfer the first XXX registered candidates at the selected test center regardless the specialty (If more than one specialty selected)
- 12.12 This mechanism used to transfer the last XXX registered candidates at the selected test center regardless the specialty. (If more than one specialty selected)
- 12.13 This mechanism used to transfer XXX registered candidates randomly from the selected test center regardless the specialty (If more than one specialty selected)
- 12.14 Candidates Number shouldn't exceed the number of candidates in the candidates' grid.
- 12.15 The system should retrieve only the assigned regions for the test session schedule.
- 12.16 Specialty should match the selected specialty in the search filtration criteria.
- 12.17 If the actor selects block transferred from appointments, the system should block the transferred from appointments.
- 12.18 If the actor doesn't select a specialty in the search filtration criteria, the system shouldn't allow the user to select a specialty in the transfer to center information. And the system should register each candidate in her/his specialty for the selected test center (Transfer to).
- 12.19 If selected, the system should allow the user to move and register candidate over the capacity of the selected center.
- 12.20 Notification message should be sent for each selected candidate by SMS and email address.
- 12.21 The system shouldn't retrieve any candidate who registered as waiting list.

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - o All selected candidates should be transferred successfully.

# 3.13 [UC 01 -05-13] - [Open /Close Test Registration for Appointment]

## Actors

The Actor of this use case will be an internal user with the role of "Registration Admin"

## **Description**

The main objective of this use case is to close the test registration on certain appointment.

## Trigger

From the Registration menu in the home page, the actor selects to open/close appointments.

## **Preconditions**

- 1. The actor should be in the registration system home page.
- 2. There is at least one opened Test cycle.
- 3. There is at least one "Available" appointment in the appointments grid.
- 4. Test Schedule should be created for the selected test session.

- 13.1 The actor selects Open/Close Appointments from the registration menu in the home page.
- 13.2 The system directs the user to Open/Close Appointments page and prompts the user to fill the test information which are the following:
  - Cycle Year. [BR 13.1]
  - Template Name. [BR 13.2]
  - Session Name. [BR 13.3]
- 13.3 The actor selects the test information; which are the following:
  - Cycle Year.
  - Template Name.
  - Session Name.
- 13.4 The actor selects to view Session Appointments grid. [BR 13.9]
- 13.5 The system displays the session appointment grid to the user with the following details: [A 13.1]
  - Days.
  - Periods.
  - Specialties.
  - Test Centers.
  - Appointments statuses.
- 13.6 The system prompts the user to Open/Close Registration on the session appointments.
- 13.7 The actor may select one Appointment and request to close Registration on the selected appointment. [BR 13.4] [BR 13.5] [BR 13.6]
  - 13.7.1 The system sets the status of the selected appointment as "Blocked"
- 13.8 The actor may select one appointment and request to Open Registration on the selected appointment. [BR 13.9] [BR 13.8] [BR 13.9]
  - 13.8.1 The system sets the status of the selected appointment as "Available"
- 13.9 The actor selects to finish.

- 13.10 The system displays the following confirmation message to the user "Appointments are updated successfully".
- 13.11 The system directs the user to the registration system home page.

13.1 In case the test schedule for the selected test session is not created, the system should display the following error message to the user "Test Schedule is not created for the selected test session"

## **Business Rules**

- 13.1 The system should retrieve only the opened test cycles.
- 13.2 The system should filter the test template based on the selected cycle year.
- 13.3 The system should filter the test sessions based on the selected test template.
- 13.4 Appointment status should be "Available" or "Waiting List".
- 13.5 The system shouldn't allow the candidate to be registered on the closed appointments.
- 13.6 The system should keep all previous test registrations on the selected appointment.
- 13.7 Appointment status should be "Blocked"
- 13.8 The system should allow test registration on the selected appointment once it being available.
- 13.9 The following table represents the appointment grid (for clarification purposes only)

I	Day	Day 1 (Date)						Day 2 (date)			
	Center	Period 1		Period 2		Period 3		Period 1		Period 2	
	Center 1					<u>Av</u>		<u>Av</u>	<u>Av</u>		<u>Av</u>
	Center 2	Waiting	<u>Av</u>	<u>Av</u>	<u>Av</u>	<u>Av</u>			Waiting	Waiting	Waiting
	Center 3	Waiting	Av	Av	<u>Av</u>	<u>Av</u>	Full	Full	Full	Full	Full

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
- Appointments statuses should be updated successfully.

# 3.14 [UC 01 -05-14] - [Transfer Money between Candidates]

## **Actors**

The Actor of this use case will be an external user with role of "Candidate"

## **Description**

The main objective of this use case is to transfer money from the candidate balance to other candidate balance. The actor of this use case will receive a certain code on his mobile number to complete the transfer process for security purposes.

## Trigger

From the Candidate home page, the actor selects to Transfer money.

#### **Preconditions**

1. The actor should be logged in to the system. [UC 01 -06-05] – [Log in Candidate]

- 14.1 The actor selects transfer money from the registration system home page.
- 14.2 The system directs the user to the Transfer money page and display the balance information of the candidate which is the following:
  - Available Balance. [BR 14.1]
- 14.3 The system prompts the user to fill in the "Transfer To" information; which are the following:
  - Registration Number.
- 14.4 The actor fills in the transfer To information; which are the following:
  - Registration Number. [A 14.1]
- 14.5 The actor selects to check the "Transfer To" Candidate.
- 14.6 The system retrieves the "Transfer To" candidate full name.
- 14.7 The system prompts the user to fill the money information; which is the following:
  - Amount in SAR. [BR 14.2] [BR 14.3]
- 14.8 The actor fills the money information; which is the following:
  - Amount in SAR
- 14.9 The actor selects to Transfer money to the selected candidate.
- 14.10 The system displays the following confirmation message to the user "Are you sure you want to transfer (Amount in SAR) SAR to the (Candidate Name)". [A 14.2]
- 14.11 The actor confirms transferring the money to the selected candidate. [A 14.3]
- 14.12 The system sends a Verification Code to the actor mobile number.
- 14.13 The system displays the following message to the user "A Verification Code has been sent to your mobile number please insert the Verification Code in order to complete your transfer".
- 14.14 The system prompts the user to insert the Verification Code. [BR 14.4] [BR 14.5]
- 14.15 The actor may request to send the Verification Code again.
- 14.16 The actor fills the received Verification Code in the transfer application page. [A 14.4]
- 14.17 The actor selects to transfer.
- 14.18 The system deducts the transferred amount from the candidate balance.
- 14.19 The system displays the following confirmation message to the user "your transfer is done successfully"
- 14.20 The system transfers the amount to the selected candidate.
- 14.21 The system increases the balance of the selected candidate by the transferred amount.

- 14.22 The system notifies both candidates the sender and the receiver with the transfer operation on their mobiles.[Message content]
- 14.23 The system directs the user to the

- 14.1 In case the registration number is not valid, the system should display the following error message to the user "Invalid Registration Number".
- 14.2 In case the "Amount in SAR" is greater than the candidate balance, the system should display the following error message to the user "transfer amount shouldn't be greater than your balance".
- 14.3 In case the actor cancels the confirmation message, the system should return the use to the transfer money page with no actions.
- 14.4 In case the verification code is invalid, the system should display the following error message to the user "Invalid Verification Code"

## **Business Rules**

- 14.1 The system should retrieve the available balance of the candidate as read only.
- 14.2 "Amount in SAR" shouldn't be greater than the Available balance.
- 14.3 "Amount in SAR" should accept decimal number only.
- 14.4 Verification Code format.
- 14.5 The actor should have the option to request to send the Verification Code again.

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
- Amount should be transferred to the selected candidate successfully.
- Both candidates should be notified by SMS.

## 4 Common Use Cases

# 4.1 [UC 01 -06-01] - [Confirm candidate Account Request for Non Saudi Non Muqeem]

## **Actors**

The Actor of this use case will be an internal user with the role of "Registration Relation Admin"

## **Description**

The main objective of this use case is to follow up candidate accounts requests that sent by Non Saudi candidates. This use case describes the business of confirming the candidate account request. A registration number and temp password to be sent to the candidate once his/her account being approved.

#### Trigger

From the "view candidate account request" page, the actor selects to confirm account request.

#### **Pre-conditions**

1. The actor should be in the "view candidate account request".

[UC 01 -04-05] - [View Non Saudi/Non Mugeem Account Request]

- 2. Account request status should be either:
  - a. Sent to RRadmin.
  - b. Application modified.

- 01.1 The actor reviews the candidate account request.
- 01.2 The actor may edit the candidate account request. [BR 01.4]
- O1.3 The actor selects to confirm the account request for the selected candidate. [BR 01.1][A 01.1]
- O1.4 The system displays the following confirmation message to the user "Are you sure you want to Approve this account".
- 01.5 The actor confirms approving the account request. [A 01.2]
- 01.6 The system approves the account request.
- 01.7 The system generates a registration number for the candidate. [BR 01.2]
- 01.8 The system generates a temp password for the candidate. [BR 01.3]
- O1.9 The system notifies the candidate with the Registration Number and the password by SMS and email address.
- 01.10 The system sets the status of the candidate account request as "Approved".
- 01.11 The system directs the user to "Search Account Requests" page.

## [UC 01 -04-02] – [Search Non Saudi/Non Muqeem Account Requests]

#### **Alternative Flow**

- O1.1 In case the actor selects to cancel the operation, the system should direct the user to the search non Saudi non Muqeem account requests page with no actions.
- O1.2 In case the actor cancels the confirmation message, the system should return the user to the view candidate account request page with no actions.

#### **Business Rules**

- 01.1 Candidate account request status should be as the following:
  - Sent to RRAdmin.
  - Or, Application modified.
- 01.2 Registration number format should be as the following:
  - YY Random Number where:
    - YY: hijiry year (32, 33, 34)
    - 8 Random Numbers and they should be unique.
- 01.3 Temp Password should be as the following:
  - Abc123
- O1.4 The actor should have the option to update all fields of the candidate information except for the uploaded files/Images.

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - Candidate account request status should be "Approved"
  - The candidate should be notified with the registration number and the temp password by SMS and email address.
  - The actor should have the option to take one of the following actions:
    - View Candidate Account Request:
      - Or [UC 01 -04-05] [View Non Saudi/Non Muqeem Account Request]

# 4.2 [UC 01 -06-02] - [Confirm With-out Account Requests]

## **Actors**

The Actor of this use case will be an internal user with the role of "Registration Relation Admin"

## **Description**

The main objective of this use case is to follow up the "With-out" accounts requests. This use case describes the business of confirming the candidate account request. National ID, registration number and temp password to be sent to the candidate once his/her account being approved.

## Trigger

From the "view With-out candidate account request" page, the actor selects to confirm account request.

#### **Pre-conditions**

1. The actor should be in the "view candidate account request".

## [UC 01 -04-06] - [View With-out Account Request]

- 2. Account request status should be either:
  - a. Sent to RRadmin.
  - b. Application modified.

#### **Normal Flow**

- 02.1 The actor reviews the account request.
- 02.2 The actor may edit the account request information. [BR 03.4]
- 02.3 The actor selects to confirm the account request for the selected candidate.
- O2.4 The system displays the following confirmation message to the user "Are you sure you want to Approve this account".
- 02.5 The actor confirms approving account request. [A 03.1]
- 02.6 The system approves the account request.
- 02.7 The system generates a registration number for the candidate. [BR 03.1]
- 02.8 The system generates a temp password for the candidate. [BR 03.2]
- 02.9 The system generates New National ID for the candidate. [BR 03.3]
- 02.10 The system notifies the candidate with the Registration Number and the password by SMS and email address.
- 02.11 The system sets the status of the candidate account request as "Approved".
- 02.12 The system directs the user to "Search with-out candidate accounts requests" page.

## **Alternative Flow**

03.1 In case the actor cancels the confirmation message, the system should return the user to the view candidate account request page with no actions.

#### **Business Rules**

- 03.1 Registration number format should be as the following:
  - YY Random Number where:
    - YY: hijiry year (32, 33, 34)
    - o 8 Random Numbers and they should be unique.
- 03.2 Temp Password should be as the following:
  - Abc123
- 03.3 National ID format [should be defined]. [National ID should be lookups for the fingerprint device] [See ID creation centers SRS document]

O3.4 The actor should have the option to update all candidate account registration except for the uploaded files/Images.

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - Candidate account request status should be "Approved"
  - The candidate should be notified with the registration number and the temp password by SMS and email address.
  - The actor should have the option to take one of the following actions:
    - View Candidate Account Request:
      - [UC 01 -04-06] [View With-out Account Request]

# 4.3 [UC 01 -06-03] - [Send Notification for Candidate]

#### **Actors**

The Actor of this use case will be an internal user with the role of "Registration Relation Admin"

## **Description**

The main objective of this use case is to follow up all candidates accounts requests. This use case describes the business of sending notification to the candidate.

## Trigger

From the "view With-out candidate account request" page, the actor selects to confirm account request.

## **Pre-conditions**

1. The actor should be in the "view candidate account request".

[UC 01 -04-06] – [View With-out Account Request]
Or, [UC 01 -04-05] – [View Non Saudi/Non Muqeem Account Request]

- 2. Account request status should be either:
  - a. New.
  - b. Application modified.

- 03.1 The actor reviews the candidate account request.
- 03.2 The actor selects to send notification on the candidate requests.

- O3.3 The system displays a pop-up screen to the actor and prompts him to notification information; which is the following:
  - Notification.
- 03.4 The actor fills the notification information; which is the following:
  - Notifications [A 03.1]
- 03.5 The actor selects to send the notification to the candidate. [A 03.2]
- 03.6 The system sends the notifications to the candidate by SMS and Email address.
- 03.7 The system sets the account requests status as "Notification Sent".
- 03.8 The system directs the user to the search account request page.

[UC 01 -04-02] – [Search Non Saudi/Non Muqeem Account Requests]
[UC 01 -04-03] – [Search without Account Requests]

#### **Alternative Flow**

- 03.1 In case the notification is not filled, the system should display the following error message "Please fill the notification".
- O3.2 In case the actor cancels the operation, the system should direct the user to the search account requests page based on the candidate type.

#### **Business Rules**

## N/A

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - o Notification sent to the candidate's mobile and email.
  - o The actor should have the option to take one of the following actions:
    - View Candidate Account Request:
      - [UC 01 -04-06] [View With-out Account Request]
      - [UC 01 -04-05] [View Non Saudi/Non Muqeem Account Request]

# 4.4 [UC 01 -06-04] - [Change Public User Password]

## **Actors**

The actor of this use case will be one of the following public users:

- 1. Candidate.
- 2. Supervisor.
- 3. Observer.
- 4. Beneficiary Agency.

## **Description**

The main objective of this use case is to change the password of the registration system public users. The actor of this use case should insert the current password and the new password in order to be able to change the current password.

## Trigger

From the "User Account (Profile)" page, the actor selects to change the password.

#### **Pre-conditions**

- 1. The actor should be logged in to the registration system.
  - [UC 01 -03-05] [Log in Beneficiary Agency]
  - [UC 01 -06-04] [Log in Candidate]
  - [Login supervisor use case]
  - [Login Observer use case]
- 2. The actor should be in the "User Account" page.

#### **Normal Flow**

- 04.1 The actor selects "Change Password".
- O4.2 The system directs the user to change password page and prompts him/her to fill change password information; which are the following:
  - Current Password.[BR 04.1]
  - New Password. [BR 04.2]
  - Confirm New Password. [BR 04.3]
- 04.3 The actor fills change password information; which are the following:
  - Current Password.[A04.1]
  - New Password. [A 04.2] [A 04.3] [A 04.4]
  - Confirm New Password. [BR 04.5]
- 04.4 The actor selects to change password.
- 04.5 The system validates the entered information.
- O4.6 The system displays the following message to the user "Your Password has been changed successfully".
- 04.7 The system directs the user to the "User Account Page".

#### **Alternative Flow**

- 04.1 In case the current password is Invalid, the system should display the following error message "Your current password is Invalid".
- 04.2 In case the new password length is less than 6 characters, the system should display the following error message "Password length should be between 6-20 characters and it should be a combination of letters and numbers"
- 04.3 In case the new password is greater than 20 characters, the system should display the following error message "Password length should be between 6-20 characters and it should be a combination of letters and numbers".

- 04.4 In case the password is no combined from letters and numbers, the system should display the following error message "Password should be a combination of letters and numbers".
- O4.5 In case the confirm new password is not match the new password, the system should display the following error message "Confirm password should match the new password"

#### **Business Rules**

- 04.1 Current Password should be valid.
- 04.2 New password length should be between 6-20 characters and it should be a combination of letters and numbers.
- 04.3 Confirm password should match the new Password.

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - User's Password should be changed successfully.

# 4.5 [UC 01 -06-05] - [Log in Candidate]

## Actors

The Actor of this use case will be a public user with a role of "Candidate"

## **Description**

The main objective of this use case is to login the system by a public user with a role Candidate. The actor of this use case shall use the received Registration Number and Received/ set password to login the system.

## Trigger

From the Registration System Login page (Public site), the actor selects to login.

## **Pre-conditions**

1. The actor should be in the registration system public site login page.

- 05.1 The system prompts the user to fill the logging information; which are the following:
  - User Name. [BR 05.1]
  - Password.
- 05.2 The actor fills the logging information; which are the following:

- User Name. [A 05.1]
- Password. [A 05.2]
- 05.3 The actor selects to login the system.
- 05.4 The system validates the entered information.
- 05.5 The system directs the user to the registration system home page. [A 05.3][A 05.4]

- 05.1 In case the user name is not valid, the system should display the following error message "Invalid user name / password".
- 05.2 In case the password is not valid, the system should display the following error message "Invalid username/ password".
- 05.3 In case not all mandatory fields are filled, the system should display the following error message "Please fill all mandatory fields" and mark the mandatory fields by asterisks.
- 05.4 In case the candidate profile information are not completed(not all mandatory fields are filled for the cases of receiving the registration numbers and temporary passwords), the system should direct the user to his/her profile and prompts him to complete profile information. [UC 01 -06-13] [Complete profile information]

#### **Business Rules**

05.1 User Name should be the received Registration Number.

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - The actor should be logged in successfully.
  - The actor should be in the registration system home page.

# 4.6 [UC 01 -06-06] - [Log out Candidate]

#### **Actors**

The Actor of this use case will be a public user with a role of "Candidate"

## **Description**

The main objective of this use case is to logout the system by a public user with a role of Candidate.

## Trigger

From the Registration System Home page (Public site), the actor selects to log out.

## **Pre-conditions**

- 1. The actor should be logged in to the system. [UC 01 -06-04] [Log in Candidate]
- 2. The actor should be in the registration system public site home page.

#### **Normal Flow**

- 06.1 The actor selects to log out from the system.
- 06.2 The system directs the user to the Registration system login page.

#### **Alternative Flow**

N/A

## **Business Rules**

N/A

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - o The actor should be logged out from the system successfully.
  - The actor should have the option to take one of the following actions:
    - Login the system. [UC 01 -06-05] [Log in Candidate]

# 4.7 [UC 01 -06-07] - [Forget Candidate Registration Number]

## **Actors**

The Actor of this use case will be a public user with a role of "Candidate"

## **Description**

The main objective of this use case is to retrieve the candidate registration number through the registration system. The candidate has to enter some information to retrieve his/her registration number.

## Trigger

From the Registration System login page, the actor selects "Forget my registration number"

## **Pre-conditions**

1. The actor should be registered at the registration system.

## **Normal Flow**

07.1 The actor selects Forget My Registration Number.

- 07.2 The system directs the user to the Forget My registration number page and prompts him/her to fill the basic information which is the following:
  - National ID.
- 07.3 The actor fills the basic information; which is the following:
  - National ID. [A 07.1]
- 07.4 The system prompts the actor to select how to retrieve registration number by displaying the following options:
  - By using the secret question.
  - By SMS.
  - By matching personal information.
- 07.5 The actor selects one way to retrieve the registration number from the following options:
  - By using the secret question.
  - By SMS. [SUB 07.1]
  - By matching personal information. [SUB 07.2]
- 07.6 The system prompts the user to fill the secret question's answer. [BR 07.1]
- 07.7 The actor fills the secret question's answer [A 07.2]
- 07.8 The actor selects retrieve registration number.
- 07.9 The system displays the registration number to the candidate.

- 07.1 In case the National ID is not exist, the system should display the following error message "national ID is not recognized"
- 07.2 In case the secret question's answer doesn't match the secret question's answer in the candidate profile, the system should display the following error message "Wrong Answer" and prompts the user to fill the answer again.
- 07.3 In case the basic information are not matched the candidate information in his/her profile, the system should display the following error message "Invalid personal information".

## Sub Flow

- 07.1 In case the candidate selects "By SMS", the system should send the registration number to the candidate mobile number which saved in his/her profile.
- 07.2 In case the candidate selects "By Matching personal information" the system prompts the actor to fill the personal information which are the following:
  - Date of Birth. [BR 07.2] [BR 07.3]
  - Mobile Number. [BR 07.4] [BR 07.5]
  - 07.2.1 The candidate fills the basic information; which are the following:
    - Date of Birth.
    - Mobile Number.
  - 07.2.2 The candidate selects retrieve registration number.
  - 07.2.3 The system displays the registration number to the candidate [A 07.3]

## **Business Rules**

- O7.1 Secret question's answer should match the secret question's answer in the candidate profile.
- 07.2 Date of Birth should match the Date of birth of the candidate in his/her profile info.
- 07.3 The actor should have the option to fill the date of birth in Hijiry or Gregorian.
- 07.4 Mobile Number should match the Mobile Number of the candidate in his/her profile info.
- 07.5 Mobile Number should be in the correct format of mobile Number [Country Code][Mobile Number]

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
- Candidate Registration Number should be retrieved successfully.

# 4.8 **[UC 01 -06-08] - [Forget Candidate Password]**

#### **Actors**

The Actor of this use case will be a public user with a role of "Candidate"

## **Description**

The main objective of this use case is to reset the candidate Password through the registration system. The candidate has to enter some information to retrieve his/her Password.

## Trigger

From the Registration System login page (Public site); the actor selects "Forget my password"

#### **Pre-conditions**

1. The actor should be registered at the registration system.

- 08.1 The actor selects Forget My Password.
- O8.2 The system directs the user to the Forget My Password page and prompts him/her to identify his/her type by selecting the following as the first step:
  - User Type [BR 08.8]
- 08.3 The actor identifies his/her type by selecting the following:
  - User Type. [A 08.7] [A 08.8]
- 08.4 The actor selects to move to the second step of Forget my password.
- 08.5 The system directs the user to the second step of forget my password and prompts the user to fill the basic information; which is the following:
  - National ID.
- 08.6 The actor fills the basic information; which is the following:

- National ID. [A 08.1]
- 08.7 The system prompts the actor to select how to retrieve Password by displaying the following options:
  - By using the secret question.
  - By SMS.
  - By matching personal information.
- 08.8 The actor selects one way to retrieve the Password from the following options:
  - By using the secret question.
  - By SMS. [SUB 08.1]
  - By matching personal information. [SUB 08.2]
- 08.9 The system prompts the user to fill the secret question's answer. [BR 08.1]
- 08.10 The actor fills the secret question's answer [A 08.2]
- 08.11 The actor selects rest password.
- 08.12 The system prompts the user to fill the new password information; which are the following:
  - New Password. [BR 08.6]
  - Confirm New Password. [BR 08.7]
- 08.13 The actor fills the new password information which are the following:
  - New Password. [A 08.4] [A 08.5]
  - Confirm New Password. [A 08.6]
- 08.14 The actor selects reset password.
- 08.15 The system displays the following message to the user "your password has been changed successfully".
- 08.16 The system directs the actor to the registration system login page.

- 08.1 In case the National ID is not exist, the system should display the following error message "national ID is not recognized"
- 08.2 In case the secret question's answer doesn't match the secret question's answer in the candidate profile, the system should display the following error message "Wrong Answer" and prompts the user to fill the answer again.
- 08.3 In case the basic information are not matched the candidate information in his/her profile, the system should display the following error message "Invalid personal information".
- 08.4 In case the new password length is not between 6-20 characters, the system should display the following error message "New Password length should be between 6-20 characters"
- 08.5 In case the new password is not combined of letters and numbers, the system should display the following error message "new Password should be a combination of letters and numbers."
- 08.6 In case the Confirm new password doesn't match the new password, the system should display the following error message "Confirm new password doesn't match the new password".

- 08.7 In case the user type is "Observer/Supervisor", the system should direct the user to forget Observers/Supervisor Password page. [See [UC 01 -03-16] [Forget Observer/Supervisor Password] in the Observers SRS document]
- 08.8 In case the user type is "Beneficiary Agency", the system should direct the user to forget beneficiary agency password page [UC 01 -03-07] [Forget Beneficiary Agency Password]

#### Sub Flow

- 08.1 In case the candidate selects "By SMS", the system should send the new password to the candidate mobile number as a temp password which is "ABC123"
- 08.2 In case the candidate selects "By Matching personal information" the system prompts the actor to fill the personal information which are the following:
  - Date of Birth. [BR 07.2] [BR 07.3]
  - Mobile Number. [BR 07.4] [BR 07.5]
  - 08.2.1 The candidate fills the basic information; which are the following:
    - Date of Birth.
    - Mobile Number.
  - 08.2.2 The candidate selects Reset Password.
  - 08.2.3 **[Go To Normal Flow 08.9] [A 07.3]**

#### **Business Rules**

- 08.1 Secret question's answer should match the secret question's answer in the candidate profile.
- 08.2 Date of Birth should match the Date of birth of the candidate in his/her profile info.
- 08.3 The actor should have the option to fill the date of birth in Hijiry or Gregorian.
- 08.4 Mobile Number should match the Mobile Number of the candidate in his/her profile info.
- 08.5 Mobile Number should be in the correct format of mobile Number [Country Code][Mobile Number]
- 08.6 New Password length should be between 6-20 characters and it should a combination of letters and numbers.
- 08.7 Confirm new password should match the new password.
- 08.8 User Type should be "Candidate".

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
- Candidate Password should be changed successfully.

## 4.9 [UC 01 -06-09] - [Complete Account Registration]

## Actors

The Actor of this use case will be a public user with a role of "Candidate"

## **Description**

The main objective of this use case is to complete the candidate account registration by uploading the required files and information to be sent to the RRadmin for approval.

## Trigger

From the Registration system login page, the actor selects to complete account registration

## **Pre-Conditions**

13.9.1 Application Number should be received by the candidate.

## **Normal Flow**

- 09.1 The actor selects to complete account registration.
- 09.2 The system prompts the user to fill the request information; which are the following:
  - Application Number. [BR 09.1]
  - Mobile Number. [BR 09.2]
- 09.3 The actor fills the request information; which are the following:
  - Application Number. [A 09.1]
  - Mobile Number. [A 09.2]
- 09.4 The actor selects to complete account request.
- O9.5 The system directs the user to the complete account request page and displays the account request details to the user. [BR 09.5]
- 09.6 The system prompts the user to fill the following information:
  - Required documents [BR 09.3]
  - Comments.
- 09.7 The actor fills the complete account request information; which are the following:
  - Required documents. [A 09.3]
  - Comments.
- 09.8 The actor selects to submit account request.
- 09.9 The system submits the account request to the RRAdmin. [BR 09.4]
- 09.10 The system sets the application status as "Application modified".
- 09.11 The system directs the user to the registration system login page.

#### **Alternative Flow**

- 09.1 In case the application number is not valid, the system should display the following error message "Invalid Application Number"
- 09.2 In case the mobile number doesn't match the mobile number in the application, the system should display the following error message "Invalid Mobile Number"

## **Business Rules**

- 09.1 Application number should be received by the candidate on his/her mobile number.
- 09.2 Mobile Number should match the mobile number in the application.
- 09.3 The system should allow the user to upload 4 documents as maximum.
- 09.4 The system should keep the Application Number as the same old application number.
- 09.5 Account request details depends on the candidate type (Non Saudi no Muqeem/ without) as the system should display the account request based on the candidate type and it should be read only.

#### **Post Conditions**

- Fail: An error message to be displayed to the candidate.
- Success:
  - Candidate account request should be sent to RRadmin successfully.

# 4.10 [UC 01 -06-10] - [Complete Saudi Mugeem Account Request]

## **Actors**

The Actor of this use case will be NCAHE internal user with role "RRadmin"

## **Description**

The main objective of this use case Is to complete Saudi/Muque account request. The actor of this use case may update the candidate information or check with Al-elm again to make sure about the candidate information.

#### Trigger

From view Saudi Muqeem account request page, the actor selects to complete account request.

## **Pre-Conditions**

13.12 The actor should be in view Saudi Muqeem account request.

## [UC 01 -04-04] – [View Saudi/Mugeem Account Request]

13.13 Account request status should be "**Sent to RRadmin**".

- 10.1 The actor reviews the candidate information.
- 10.2 The actor may update the candidate information.[BR 10.1].
- 10.3 The actor may check the candidate information with AL-Elm. [UC 01 -06-11] [Check Candidate information with AL-Elm by RRadmin]
- 10.4 The actor selects to complete account Registration. [A 10.1]
- 10.5 The system approves the candidate account registration.

- 10.6 The system sets the status of the account registration as approved.
- 10.7 The system generates registration number and temp password for the candidate. [BR 10.2] [BR 10.3]
- 10.8 The system notifies the candidate with the registration number and the temp password via email address and mobile.
- 10.9 The system directs the user to the search Saudi/Muqeem account requests page.

10.1 In case the actor cancels the operation, the system should direct the user to the search Saudi Muqeem account requests page with no actions.

#### **Business Rules**

- 10.1 The actor should have the option to update all fields of the candidate information except for the "personal certificate".
- 10.2 Temp Password format should be as the following:
  - 14. Abc123
- 10.3 Registration number format should be as the following:
  - YY Random Number where:
    - YY: hijiry year (32, 33,34)
    - 8 Random Numbers and they should be unique.

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - o Candidate account request status should be approved.
  - o Notification should be sent to the candidate mobile and email address.

# 4.11 [UC 01 -06-11] - [Check Candidate information with AL-Elm by RRadmin]

## **Actors**

The Actor of this use case is Al-Elm (web service).

## **Description**

The main objective of this use case is to check the candidate's information with AL Elm through YESSER or directly.

## Trigger

From view Saudi Muqeem account request page, the actor selects to check candidate information with Al-Elm

#### **Pre-Conditions**

1. The actor should be in view Saudi Muqeem account request.

[UC 01 -04-04] – [View Saudi/Muqeem Account Request]

2. Account request status should be "Sent to RRadmin".

## **Normal Flow**

- 11.1 The actor selects to check the candidate information with Al-Elm. [BR 11.1]
- 11.2 The system sends the candidate's information to be verified with Al-Elm through web services. The candidate information are the following:
  - National ID/ Iqama Number.
  - Year of Birth.
- 11.3 Al-Elm verifies the candidate information. [BR 11.2]
- 11.4 Al-Elm sends the candidate information for the submitted national ID which are the following: [A 02.1]
  - National ID.
  - Full Name.
  - Date of Birth.
  - Gender.
- 11.5 The system receives the candidate information from Al-Elm through the web service.

#### **Alternative Flow**

- 11.1 In case the National ID and the Year of birth are not matched at Al-elm, the system should display the following error message to the user "Invalid information".
  - 11.1.1 The system directs the user to view Saudi Muqeem account request.

## **Business Rules**

- 11.1 The actor has fixed number of the attempts to check the candidate information with Al-Elm. [system parameter]
- 11.2 The system should check the record of the candidate with Al-Elm through a web service by sending the national ID with the year of birth as entered by the candidate to be checked if they are matched with the candidate information at Al-Elm.

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - o Candidate information should be checked with Al-Elm Successfully.

# 4.12 [UC 01 -06-12] - [Delete Candidate Account Request]

## **Actors**

The Actor of this use case will be NCAHE internal user with role "RRadmin"

## **Description**

The main objective of this use case is to delete the candidate account request. Once the user deletes the account request of the candidate, the system deletes the account request permanently from the registration system.

## Trigger

From view candidate account request page, the actor selects to delete account request.

## **Pre-Conditions**

- 1. The actor should be in view candidate account request page.
  - [UC 01 -04-04] [View Saudi/Muqeem Account Request]
  - [UC 01 -04-05] [View Non Saudi/Non Mugeem Account Request]
  - Or, [UC 01 -04-06] [View With-out Account Request]
- 2. Account request status should be "Sent to RRadmin" for the Saudi and Mugeem.
- 3. Account request status should be "**Sent to RRadmin**" or "**Application modified**" for the Non Saudi and without candidates.

## **Normal Flow**

- 12.1 The actor reviews the candidate information. [BR 12.1]
- 12.2 The actor selects to delete the candidate account request. [A 12.1]
- 12.3 The system displays the following confirmation message to the user "Are you sure you want to delete the account request".
- 12.4 The actor confirms on deleting the candidate account request. [A 12.2]
- 12.5 The system deletes the candidate account request permanently from the registration system.
- 12.6 The system directs the user to the search candidates account requests page.
  - [UC 01 -04-01] [Search Saudi/Muqeem Account Requests]
  - [UC 01 -04-02] [Search Non Saudi/Non Mugeem Account Requests]
  - Or, [UC 01 -04-03] [Search With-out Account Requests]

12.7

## **Alternative Flow**

12.1 In case the actor cancels the operation, the system should direct the user to the search Saudi Muqeem account requests page with no actions.

12.2 In case the actor cancels the confirmation message, the system should return the user to the view candidate account request page with no actions.

#### **Business Rules**

- 12.1 Candidate account request status should be as the following:
  - "Sent to RRadmin": for the Saudi/Mugeem account requests.
  - "Sent to RRadmin" or "Application modified" for the Non Saudi non Muqeem and for the without candidates.

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - Candidate account request status should be permanently deleted from the registration system.

# 4.13 [UC 01 -06-13] - [Complete profile information]

## **Actors**

The Actor of this use case will be an external user with role "Candidate"

## **Description**

The main objective of this use case is to complete the profile information of the candidate after his/her account being approved by the registration relation admin.

## Trigger

From the registration system public site home page, the system prompts the user to complete profile information.

## **Pre-Conditions**

1. The actor should be logged in.

- 13.1 The system prompts the user to complete his/her profile information.; which are the following:
  - Personal information. [BR 13.1]
  - Contact information:
    - Mobile Number. [BR 13.2]

- Other Mobile Number. [BR 13.2]
- Email Address. [BR 13.3]
- Profile information:
  - Account Type.
  - Account Type Level one. [BR 13.4]
  - Account Type Level two. [BR 13.5]
  - Account Type Level Three. [BR 13.6]
  - Region.
  - City. [BR 13.7]
  - School Name. [BR 13.8]
  - Secret Question.
  - Secret Question's Answer.
  - Personal Photo. [BR 13.09]
  - Personal Certificate.
  - Fingerprint Photo. [BR 13.10]
  - Finger print template
- 13.2 The actor fills in the profile information; which are the following:
  - Personal information.
  - Contact information:
    - Mobile Number.
    - Other Mobile Number.
    - Email Address. [A 13.1]
  - Profile information:
    - Account Type.
    - Account Type Level one.
    - Account Type Level two.
    - Account Type Level Three.
    - Region.
    - City.
    - School Name.
    - Secret Question.
    - Secret Question's Answer.
    - Personal Photo.
    - Personal Certificate.
- 13.3 The actor selects to save.
- 13.4 The system validates the candidate profile information.
- 13.5 The system saves the candidate profile information.
- 13.6 The system displays the following confirmation message to the user "Your profile has been updated successfully". [A 13.2]
- 13.7 The system directs the user to the registration system home page.

13.1 In case the email address is not in the correct format of email address, the system should display the following error message "Invalid Email Address".

13.2 In case not all mandatory fields are filled, the system should display the following error message to the user "Please fill all mandatory fields" and mark the mandatory fields with red asterisks.

## **Business Rules**

- 13.1 Personal Information depends on the candidate type as the system should retrieve the candidate personal information as filled (in the create candidate account application) after it being approved as read only except for the contact information.
- 13.2 Mobile Number should be in a correct format of mobile Number and it should be in two textboxes with the following format. [+ "Country Code"] ["Mobile Number"].
- 13.3 Email Address should be in a correct format of email address [Email Name @hostname.xxx]
- 13.4 The system should filter the "account type level 1" based on the selected "Account Type"
- 13.5 The system should filter the "Account type level2" based in the selected "Account type level1".
- 13.6 The system should filter the "Account type level3" based on the selected "Account type level2".
- 13.7 The system should filter "City" based on the selected Region.
- 13.8 "Schools" should be filtered based on the selected city.
- 13.9 "Personal Photo" is required just in case the candidate gender is "Male".
- 13.10 Finger print photo should be empty and it shouldn't be entered by the user. Finger print photo will be uploaded to the candidate through the finger print device. [See finger print device requirements]

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success: Candidate Profile information should be updated successfully.

# 4.14 [UC 01 -06-14] - [Edit Candidate profile information]

## **Actors**

The Actor of this use case will be an external user with role "Candidate"

## **Description**

The main objective of this use case is to edit candidate profile information.

## Trigger

From the candidate home page, the actor selects to edit his/her profile information.

## **Pre-Conditions**

c. The actor should be logged in.

- 14.1 The actor selects to edit his/her profile information from the registration system home page.
- 14.2 The system directs the user to the edit profile information page and prompts the user to edit his/her profile information; which are the following: [BR 14.11]
  - Personal information. [BR 14.1]
  - Contact information:
    - Mobile Number. [BR 14.2]
    - Other Mobile Number. [BR 14.2]
    - Email Address. [BR 14.3]
  - Profile information:
    - Account Type.
    - Account Type Level one. [BR 14.4]
    - Account Type Level two. [BR 14.5]
    - Account Type Level Three. [BR 14.6]
    - Region.
    - City. [BR 14.7]
    - School Name. [BR 14.8]
    - Secret Question.
    - Secret Question's Answer.
    - Personal Photo. [BR 14.09]
    - Personal Certificate.
    - Fingerprint Photo. [BR 14.10]
    - Finger print template
- 14.3 The actor may update the profile information; which are the following:
  - Personal information.
  - Contact information:
    - Mobile Number.
    - Other Mobile Number.
    - Email Address. [A 14.1]
  - Profile information:
    - Account Type.
    - Account Type Level one.
    - Account Type Level two.
    - Account Type Level Three.
    - Region.
    - City
    - School Name.
    - Secret Question.
    - Secret Question's Answer.
    - Personal Photo.
    - Personal Certificate.
- 14.4 The actor selects to save the profile information.
- 14.5 The system validates the candidate profile information.
- 14.6 The system saves the candidate profile information.

- 14.7 The system displays the following confirmation message to the user "Your profile has been updated successfully". [A 14.2]
- 14.8 The system directs the user to the registration system home page.

- 14.1 In case the email address is not in the correct format of email address, the system should display the following error message "Invalid Email Address".
- 14.2 In case not all mandatory fields are filled, the system should display the following error message to the user "Please fill all mandatory fields" and mark the mandatory fields with red asterisks

#### **Business Rules**

- 14.1 Personal Information depends on the candidate type as the system should retrieve the candidate personal information as filled (in the create candidate account application) after it being approved as read only except for the contact information.
- 14.2 Mobile Number should be in a correct format of mobile Number and it should be in two textboxes with the following format. [+ "Country Code"] ["Mobile Number"].
- 14.3 Email Address should be in a correct format of email address [Email Name @hostname.xxx]
- 14.4 The system should filter the "account type level 1" based on the selected "Account Type"
- 14.5 The system should filter the "Account type level2" based in the selected "Account type level1".
- 14.6 The system should filter the "Account type level3" based on the selected "Account type level2".
- 14.7 The system should filter "City" based on the selected Region.
- 14.8 "Schools" should be filtered based on the selected city.
- 14.9 "Personal Photo" is required just in case the candidate gender is "Male".
- 14.10 Finger print photo should be empty and it shouldn't be entered by the user. Finger print photo will be uploaded to the candidate through the finger print device. [See finger print device requirements]
- 14.11 The actor should be able to edit the profile information except for the following fields:
  - First Name.
  - Father Name.
  - Grandfather Name.
  - Family Name.

### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success: Candidate Profile information should be updated successfully.

# 4.15 [UC 01 -06-15] - [View Candidate Profile Information]

The Actor of this use case will be an external user with role "Candidate"

## **Description**

The main objective of this use case is to view candidate profile information as read only information.

## Trigger

From the candidate home page, the actor selects to view profile information.

## **Pre-Conditions**

d. The actor should be logged in.

#### **Normal Flow**

- 15.1 The actor selects to view his/her profile information from the registration system home page.
- 15.2 The system directs the user to the view profile information page and displays the candidate profile information; which are the following: [BR 15.1]
  - Personal information. [BR 15.2]
  - Contact information:
    - Mobile Number.
    - Other Mobile Number.
    - Email Address.
  - Profile information:
    - Account Type.
    - Account Type Level one.
    - Account Type Level two.
    - Account Type Level Three.
    - Region.
    - City
    - School Name.
    - Secret Question.
    - Secret Question's Answer.
    - Personal Photo.
    - Personal Certificate.
    - Fingerprint Photo.

## **Alternative Flow**

N/A

## **Business Rules**

- 15.1 Candidate profile information should be displayed as read only.
- 15.2 Personal Information depends on the candidate type as the system should retrieve the candidate personal information as filled (in the create candidate account application) after it being approved as read only except for the contact information

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success: Candidate Profile information should be displayed successfully.

# **5** Registration Administrator Use Cases

# **5.1 [UC 01 -07-01] - [Create Candidate Account]**

#### **Actors**

The Actor of this use case will be an internal user with the role of "Registration Admin"

## **Description**

The main objective of this use case is to create candidate account by the Registration administrator, the actor of this use case has to determine the candidate type before creating the account.

## Trigger

From the Registration menu in the home page, the actor selects to create candidate account.

## **Pre-conditions**

1. The actor should be in the registration system home page (Internal site)

## **Normal Flow**

- O1.1 The actor selects to create candidate account from the registration mega menu in the home page.
- O1.2 The system directs the user to create candidate account page and prompts the user to fill the first step of account registration "Select Candidate Type"; which is the following:
  - Candidate Type. [BR 01.1] [BR 01.5] [BR 01.6] [BR 01.7]
- O1.3 The actor fills the first step of account registration "Select candidate Type"; which is the following:
  - Candidate Type [SUB 01.1] [SUB 01.2]
- O1.4 The actor selects to move to the second step of the account registration 'Registration Instructions" [BR 01.2]
- O1.5 The system moves the candidate to the second step of account registration "Registration Instructions" [A 01.1]
- O1.6 The actor goes though the account registration steps until the application being approved.

[UC 01 -02-01] – [Create Account for Saudi/Muqeem]

## Sub Flow

01.1 In case the actor selects the candidate type as "Non Saudi / Non Muqeem", the system should direct the use through the non-Saudi non Muqeem account registration steps. [BR 01.4]

## [UC 01 -02-03] - [Create Account for Non Saudi/Non Mugeem Auto Approval]

01.2 In case the actor selects the candidate type as "Without", the system should direct the user through the without account registration steps. [BR 01.3]

[UC 01 -02-05] - [Create candidate account for without]

#### **Alternative Flow**

O1.1 In case the candidate type is not selected, the system should display the following error message to the user "Please select candidate type".

## **Business Rules**

- 01.1 The system should allow the user to select any type of the candidate as the following:
  - Saudi/Mugeem.
  - Non Saudi/Non Mugeem.
  - Without.
- 01.2 Registration Instructions should be loaded based on the selected candidate type.
- 01.3 The actor should fill all information of without candidate profile without submitting the application to the RRadmin and complete the account Registration.
- 01.4 The system should allow the user to go through the Non Saudi/Non Muqeem account request without submitting the application to the RRadmin
- 01.5 The system should allow the user to go through the Saudi/Muqeem account request without submitting the application to the RRadmin.
- 01.6 The system should allow the user to check the Saudi/Muqeem information with Al-Elm.
- 01.7 The system should allow the user to skip the step of checking with AL-Elm.
- 01.8 There is no approval chain for the account registration; the registration admin has to complete the account registration until the application being approved.

## **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - o Candidate Account Request should be created successfully.
  - The candidate should be notified with the Registration Number and Temporary password by Email and SMS.
  - o Candidate Account Registration status should be approved.

## 5.2 [UC 01 -07-01] - [Register candidate for Test by Admin]

#### **Actors**

The Actor of this use case will be an internal user with the role of "Registration Admin"

## **Description**

The main objective of this use case is to register an individual/group of candidate for certain test within an open test cycle.

#### Trigger

From the Registration menu in the home page, the actor selects to register candidate to test.

#### **Pre-conditions**

- 1. The actor should be in the registration system home page (Internal site)
- 2. There is an open "Test Cycle".

#### **Normal Flow**

- O2.1 The actor selects "Candidate Test Registration" from the Registration menu in the home page.
- O2.2 The system directs the user to the "Candidate Test Registration" and prompts the user to select the test registration mechanism from the following options: [A 02.3]
  - Group Test Registration. [BR 01.2]
  - Individual Test Registration.
- 02.3 The actor selects the test registration mechanism from the following options:
  - Group Test Registration.
  - Individual Test Registration. [SUB 02.1]
- O2.4 The system prompts the user to upload the Test Registration Sheet [BR 02.2] [BR 02.3] [BR 02.4] [BR 02.6] [BR 02.7] [BR 02.9] [BR 02.11] [BR 02.12]
- 02.5 The actor uploads the Test Registration sheet.
- 02.6 The actor may select to notify the candidate for the payment by selecting the following:
  - Notify Candidates for the payment by SMS. [BR 02.5] [BR 02.8]
- 02.7 The actor selects to finish the Test Registration process.
- O2.8 The system should display the following confirmation message to the user "Test Registration Process is done successfully". [A 02.1] [A 02.2]
- O2.9 The system publishes the test registration on the candidates' dashboards with the following details: [BR 02.10]
  - [Details are pending on Qiyas]
- 02.10 The system generates a Registration notice for each candidate in the list. [BR 02.13]
- 02.11 The system notifies the candidates with the test registration by Email Address and SMS.
- 02.12 The system directs the user to the registration system home page.

#### **Sub Flow**

- O2.1 In case the actor selects "Individual Test Registration", the system should prompt the user to select the candidate by filling his/her registration number.
  - 02.1.1 The actor fills the candidate registration number. [A 02.3]
  - 02.1.2 The actor may select to notify the candidate for the payment by selecting the following:
    - Notify Candidates for the payment by SMS. [BR 02.5] [BR 02.8]

- 02.1.3 The actor selects to move to the next step of test registration.
- 02.1.4 The system prompts the user to go through all registration steps **except** for the step of Payment. [UC 01 -05-01] [Register Candidate for Test] [BR 0]

#### **Alternative Flow**

- O2.1 In case one or more of the registered candidates are not eligible to the exam, the system should display the following error message to the user "the following candidate(s) (Candidate name) are not eligible to the selected exam, please modify document and reupload it again".
- O2.2 In case the "Allow registration over capacity" is not checked at the selected center and the number of registered students exceeds the center capacity, the system should display the following error message to the user "The number of registered candidates are exceed the center capacity".
- O2.3 In case the Registration number is not valid, the system should display the following error message "Invalid Registration Number".
- O2.4 In case there is no opened test cycle, the system should display the following error message "At least one open cycle should be defined"

#### **Business Rules**

- O2.1 Group test Registration should be through uploading an excel sheet with name "Test Registration Sheet"
- 02.2 Test Registration sheet should be a template which contains the following details:
  - Test Name [From the Template information]
  - Session Name. [From the Session information]
  - Session Number. [From the Session information]
  - Session Gender. [From the Session information]
  - Candidates Registration Number.
  - Candidates Full Names.
  - Appointment information [Schedule Information]
    - Day.
    - Date.
    - Period.
    - Center Name.
- O2.3 All selected candidates should be eligible to be restarted for selected session by the following rules:
  - For the candidate:
    - Account Type: should match the selected account type in the Test Template.
    - Account Type Level1: should match the selected account type in the Test Template.
    - Account Type Level2 : should match the selected account type in the Test
       Template (If it is selected at the template level)
    - Date of Birth: should match the selected date of birth in the test template
       (If it is selected at the template level)

- And, Test Session:
  - Session Gender should match the Candidate Gender.
- And, Test Center:
  - Center Gender should match the Candidate Gender.
- Otherwise, the system should notify the Registration admin for any conflicts.
- O2.4 The system shouldn't accept any format except for the excel sheet format for the uploaded file.
- O2.5 If selected, the system should notify the candidate for the payment by SMS after finishing the process of candidate test registration. [Message content]
- O2.6 The system should display any exception regarding to the selected test center/appointments regarding to the capacity, waiting list to the user.
- 02.7 Test Registration status should be one of the following statuses:
  - Not confirmed/ waiting payment.
  - Waiting List/ Waiting Payment.
- O2.8 SMS should contain the grace period for the early and late registration [if it selected in the at the session level].
- 02.9 There is no seat booking for the candidate with the following registration status:
  - Waiting List / Waiting Payment.
  - Waiting List.
- 02.10 Candidate should be eligible to print the Registration notice from his/her dashboard.[UC 01 -05-04] [Print Registration Notice]
- 02.11 If the "Allow registration over the specialty capacity" is checked at the center level, the system should register candidate on other specialties' seats if his/her specialty seats are full.
- O2.12 Seat number should be created by the system and only it should be on the actual center capacity only and for the following registration statuses:
  - **Confirmed**: [Appointment confirmed, Paid]
  - Not Confirmed/Waiting Payment: [Appointment Confirmed, not Paid]
- 02.13 Candidate can print the registration notice from his/her dashboard and the registration notice contains the following details: [Refer to [UC 01 -05-01] [Register Candidate for Test] for more information about the Registration notice step number 01.23]
  - Candidate Details:
    - Full Name.
    - National ID.
    - Registration Number.
  - Appointment Details:
    - Day.
    - Date.
    - Period.
    - Specialty.
  - Group Details
    - Group Number.
  - Center Details
    - Region.
    - City.
    - Center Name.

- Payment details:
  - Payment Status.
- Session Notes.
- Bar Code.
- Registration Status.
- Identity Notes.
- Registration time.
- Seat Number.

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - Selected Candidate should be registered to the selected test successfully.
  - o Test details should be published to the candidate dashboard successfully.
  - o the status of the test registration should be one of the following values:
    - Not Confirmed/Waiting Payment:[Appointment Confirmed, not Paid]
    - Waiting List/waiting Payment: [Appointment Waiting List, Not Paid]
  - The **Candidate** should have the option to take one of the following actions:
    - Cancel Test Registration. [UC 01 -05-09] [Cancel Test Registration]
    - Pay test registration. [UC 01 -05-07] [Pay Test Registration]
    - Modify Test Registration. [UC 01 -05-08] [Modify Test Registration]

#### 5.3 [UC 01 -07-03] - [Reset Public User Password]

# Actors The Actor of this use case will be an internal user with the role of "Registration Admin" Description The main objective of this use case is to reset the public user password. Trigger

From the Registration menu in the home page, the actor selects to register candidate to test.

#### **Pre-conditions**

1. The actor should be in the registration system home page (Internal site)

#### **Normal Flow**

- 03.1 The actor selects "Reset Public user password" from the Registration menu in the home page.
- 03.2 The system directs the user to the "Reset public user password" and prompts him to select the public user type from the following options:
  - Candidate.
  - Observer/Supervisor.
  - Beneficiary Agency.
- 03.3 The actor selects the public user from the following options:
  - Candidate.
  - Observer/Supervisor. [SUB 03.1]
  - Beneficiary Agency. [SUB 03.2]
- 03.4 The system prompts the use to fill the candidate information; which are the following:
  - Candidate National ID.
- 03.5 The actor fills the candidate information; which are the following:
  - Candidate National ID. [A 03.1]
- 03.6 The actor selects to search for the candidate.
- 03.7 The system displays the candidate information in a grid with the following details:
  - Candidate National ID.
  - Registration Number.
  - Candidate Full Name.
- 03.8 The actor selects to reset the candidate password.
- 03.9 The system resets the candidate password.
- 03.10 The system notifies the candidate with the Registration Number and the new password by SMS.[BR 03.1]
- 03.11 The system displays the following confirmation message to the user "reset password done successfully and the new password is sent to the candidate"

#### Sub Flow

- 03.1 In case the actor selects the public user as "Observer/Supervisor", the system prompts the use to fill the observer/supervisor information; which are the following:
  - Observer/Supervisor National ID.
  - 03.1.1 The actor fills the candidate information; which are the following:
    - Observer/supervisor National ID. [A 03.1]
  - 03.1.2 The actor selects to search for the observer/supervisor.
  - 03.1.3 The system displays the supervisor /observer information in a grid with the following details:
    - Observer / Supervisor National ID.
    - Observer / Supervisor Full Name
  - 03.1.4 The actor selects to reset the observer/ supervisor password.
  - 03.1.5 The system resets the observer/supervisor password.
  - 03.1.6 The system notifies the Observer / supervisor with the new password by SMS.[BR 03.1]
  - 03.1.7 The system displays the following confirmation message to the user "reset password done successfully and the new password is sent to the Supervisor/ Observer"

- 03.2 In case the actor selects the public user as "Beneficiary Agency", the system prompts the use to fill the Beneficiary Agency information; which are the following:
  - Beneficiary Agency Name.
  - 03.2.1 The actor fills the candidate information; which are the following:
    - Beneficiary Agency Arabic Name. [A 03.2]
  - 03.2.2 The actor selects to search for the Beneficiary Agency.
  - 03.2.3 The system displays the Beneficiary Agency information in a grid with the following details:
    - Beneficiary Agency Arabic Name.
    - Beneficiary Agency English Name.
  - 03.2.4 The actor selects to reset the Beneficiary Agency password.
  - 03.2.5 The system resets the Beneficiary Agency password.
  - 03.2.6 The system notifies the Beneficiary Agency contact person with the beneficiary agency user name and new password by SMS.[BR 03.1]
  - 03.2.7 The system displays the following confirmation message to the user "reset password done successfully and the new password is sent to the Beneficiary agency contact person"

#### **Alternative Flow**

- 03.1 In case the national Id of the candidate is not valid, the system should display the following error message to the user "Invalid National ID".
- O3.2 In case the Beneficiary Agency Arabic Name is not valid, the system should display the following error message to the user "Invalid Beneficiary Agency Arabic Name"

#### **Business Rules**

- 03.1 New password format should be as the following:
  - Abc123

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
- New Password should be sent to the public user.

#### 5.4 [UC 01 -07-04] - [View Candidate detailed information]

#### Actors

The Actor of this use case will be an internal user with the role of "Registration Admin"

#### **Description**

The main objective of this use case is to view the candidate details and the candidate registered tests by the registration admin.

#### Trigger

From the Registration menu in the home page, the actor selects to View Candidate detailed information.

#### **Pre-conditions**

1. The actor should be in the registration system home page (Internal site)

#### **Normal Flow**

- 04.1 The actor selects "View Candidate detailed information" from the Registration menu in the home page.
- 04.2 The system directs the user to the "View Candidate detailed information" page and prompts him to fill the following candidate information:
  - Candidate Registration Number.
- 04.3 The actor fills the candidate national ID and request to view the candidate details.[A 04.1]
- 04.4 The system displays the candidate details to the user as the following: [BR 04.1]
  - Basic Information
    - Candidate Registration Number.
    - Candidate Full name.
    - Candidate mobile Number.
    - Account Type.
    - Account Details level1.
    - Account details level2.
  - Exams Registered.
    - Session Name.
    - Day.
    - Date.
    - Period.
    - Payment method.
    - Grade.

#### **Alternative Flow**

04.1 In case the candidate registration number is invalid, the system should display the following error message to the user "Invalid Registration Number"

#### **Business Rules**

04.1 Candidate details should be read only.

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:

- Candidate details should be displayed successfully to the user.
- The actor should have the option to take one of the following actions:
  - Modify Test Registration. [UC 01 -07-06] [Cancel Test Registration by Admin]
  - Cancel Test Registration.[ UC 01 -07-05] [Cancel Test Registration by Admin]

# 5.5 [UC 01 -07-05] – [Cancel Test Registration by Admin]

#### **Actors**

The Actor of this use case will be an internal user with the role of "Registration Admin"

#### **Description**

The main objective of this use case is to cancel candidate test registration by the registration admin.

#### Trigger

From the "View Candidate detailed information" page, the actor selects to cancel candidate test registration.

#### **Pre-Conditions**

- 1. The actor should be in "View Candidate detailed information".
  - a. [UC 01 -07-04] [View Candidate detailed information]
- 2. "Enable Registration cancelation" should be checked in the test session.
- 3. "Current Date" should be less than the "Appointment date".

#### **Normal Flow**

- The actor selects once exam from the registered exams of the candidate and request to cancel test registration. [BR 05.1] [BR 05.2] [BR 05.3] [BR 05.4] [BR 05.5]
- O5.2 The system displays the following confirmation message to the user "Are you sure you want cancel the test registration". [A 05.1] [A 05.2]
- 05.3 The actor confirms the confirmation message. [A 05.3]
- 05.4 The system cancels the test registration.
- O5.5 The system moves the test registration to the canceled test list on the candidate dashboard.
- O5.6 The system sets the status of the previous registration test as "Canceled by the Registration Admin"
- 05.7 The system sets the reason of cancelation as "canceled appointment". [BR 05.6]
- 05.8 The system notifies the candidate with his/her test registration cancelation.
- 05.9 The system directs the candidate to public site home page.

#### **Alternative Flow**

- 05.1 In case the "Enable Registration cancelation" is not checked and the status of the previous appointment is "Confirmed" or "Not confirmed/Waiting Payment", the system should display the following error message "You can't cancel your registration".
- 05.2 In case the current date is greater than or equal the appointment date and the registration status is "Confirmed" or "Not Confirmed/waiting payment" the system should display the following error message "You can't cancel your registration".
- 05.3 In case the actor cancels the confirmation message, the system should return the user to the candidate dashboard with no actions.

#### **Business Rules**

- 05.1 Current Date should be less than the Appointment date.
- 05.2 "Enable Registration cancelation" should be checked in the test session.
- 05.3 If the status of the appointment is "Waiting List" or "Confirmed" the system should refund the paid fees to the candidate balance.
- 05.4 "Enable Registration cancelation" should be checked in the test session. This business rule to allow registration cancelation for the registered test with status "Confirmed" or "Not Confirmed/waiting payment" only. And the user should be able to cancel the test registration for other statues without enabling test registration cancelation in the test session.
- 05.5 The system should allow the admin to cancel the test registration if the test registration status is "waiting list" or "Waiting List/Waiting Payment" regardless the current date.
- 05.6 The system should accept the first (based on the registration time (Date :HH MM) candidate who registered as a waiting list (If Any) for the selected appointment and sets the registration status for him/her as the following:
  - If the previous registration status is "Waiting List" the system should set the new registration status as "Confirmed".
  - If the previous registration status is "Waiting List/waiting payment" the system should set the new registration status as "not confirmed/waiting payment"

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - Test registration should be canceled successfully.

# 5.6 [UC 01 -07-06] - [Modify Test Registration by Admin]

#### **Actors**

The Actor of this use case will be an internal user with the role of "Registration Admin"

#### **Description**

The main objective of this use case is to modify candidate test registration by the registration admin.

#### Trigger

From the "View Candidate detailed information" page, the actor selects to cancel candidate test registration.

#### **Pre-Conditions**

- 1. The actor should be in "View Candidate detailed information".
  - a. [UC 01 -07-04] [View Candidate detailed information]

#### **Normal Flow**

- O6.1 The actor selects once exam from the registered exams of the candidate and request to modify test registration.
- 06.2 The system directs the user to modify test registration page.
- O6.3 The system prompts the user to go through all modify test registration steps [See Modify test registration by the candidate use case (the same steps)]. [BR 06.1]

#### [UC 01 -05-08] – [Modify Test Registration]

Note: the main difference is the previous test registration status as it will be "Canceled by Admin" in this use case instead of "Canceled by candidate" in the [UC 01 -05-08] – [Modify Test Registration] use case.

#### Sub Flow

Refer to use case [UC 01 -05-08] – [Modify Test Registration]

#### **Alternative Flow**

Refer to use case [UC 01 -05-08] – [Modify Test Registration]

#### Refer to use case [UC 01 -05-08] – [Modify Test Registration]

#### **Post Conditions**

- Fail: An error message to be displayed to the user.
- Success:
  - o Test registration should be changed successfully.
  - the status of the test registration should be one of the following values:
    - Confirmed: [Appointment confirmed, Paid]
    - Not Confirmed/Waiting Payment:[Appointment Confirmed, not Paid]
    - Waiting List:[Appointment waiting list, Paid]
    - Waiting List/waiting Payment: [Appointment Waiting List, Not Paid]
  - o The status of the previous test registration should be "Canceled by Admin"

### 5.7 [UC 01 -07-07] – [View Registration Status for Test Session]

#### **Actors**

The Actor of this use case will be an internal user with the role of "Registration Admin"

#### **Description**

The main objective of this use case is to view the test registration status of certain test session.

#### Trigger

From the Registration menu in the home page, the actor selects to View test registration status.

#### **Preconditions**

- 1. The actor should be in the registration system home page.
- 2. There is at least one opened Test cycle.

#### **Normal Flow**

- 07.1 The actor selects to view registration status from the Registration home page.
- O7.2 The system directs the user to the view registration status page and prompts the user to fill the test information which are the following:
  - Cycle Year. [BR 07.1]
  - Template Name. [BR 07.2]
  - Session Name. [BR 07.3]
- 07.3 The actor selects the test information; which are the following:
  - Cycle Year.
  - Template Name.

- Session Name.
- 07.4 The actor selects to view the registration status. [A 07.1]
- O7.5 The system displays the registration status of the selected session with the following details in a grid. [BR 07.4] [BR 07.5]
  - Center Name.
  - Day.
  - Date.
  - Period.
  - Specialty.
  - Number of registered candidates.
  - Remaining seats. [BR 07.6]

#### **Alternative Flow**

07.1 In case the current date is less than the start registration date in the session information, the system should display the following error message "there is no registration for the selected test session".

#### **Business Rules**

- 07.1 The system should retrieve only the opened test cycles.
- 07.2 The system should filter the test template based on the selected cycle year.
- 07.3 The system should filter the test sessions based on the selected test template.
- 07.4 The following table represents the gird (for clarification only)

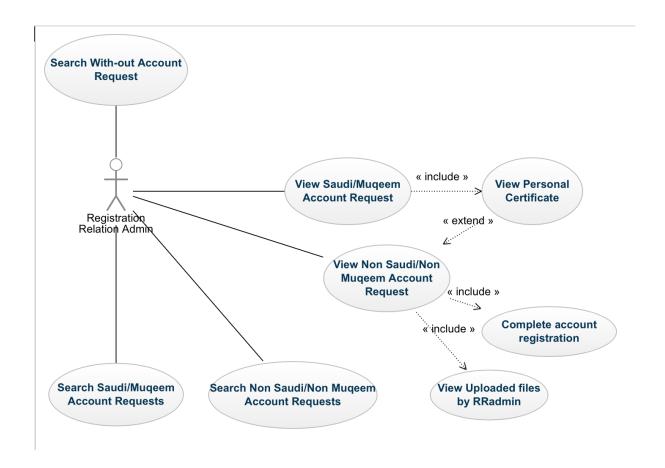
	Day + Date Period			
	Specialty		Specialty	
	# of registered	Remaining	# of registered	Remaining
Center	students	Seats	students	Seats
	# of registered	Remaining	# of registered	Remaining
Center	students	Seats	students	Seats

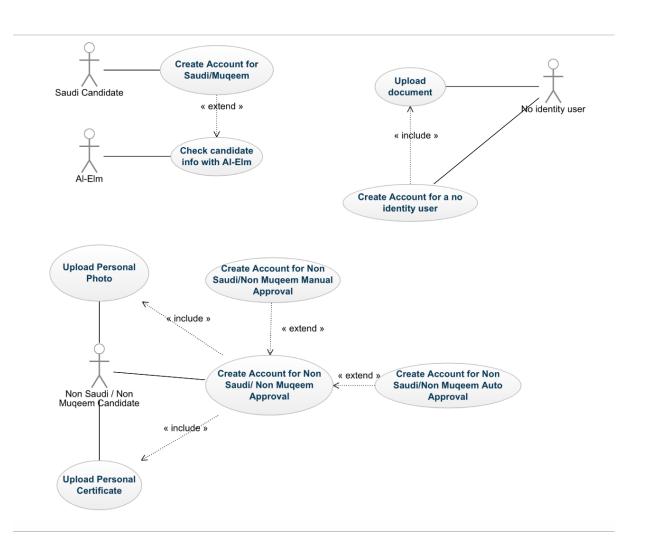
- 07.5 The grid of the registration status should be read only.
- 07.6 Remaining seats equal Center Capacity Number of registered students.

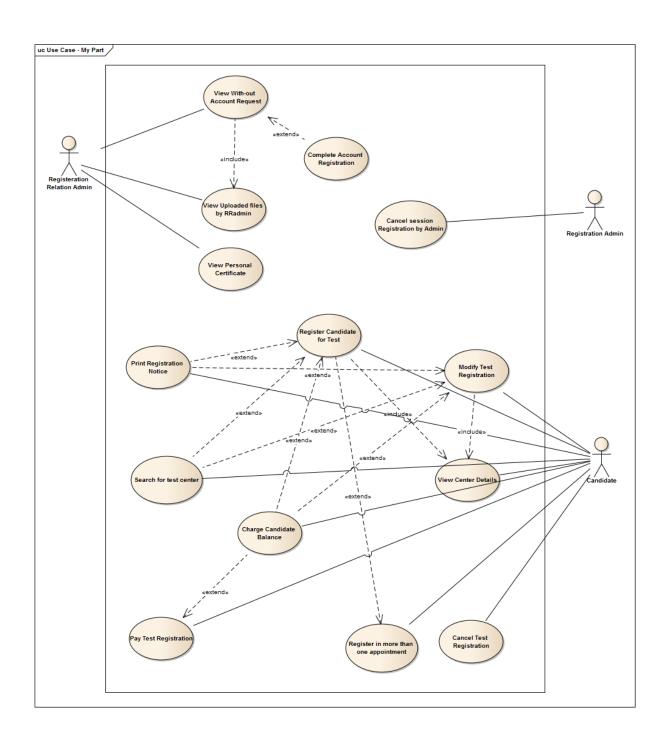
#### **Post Conditions**

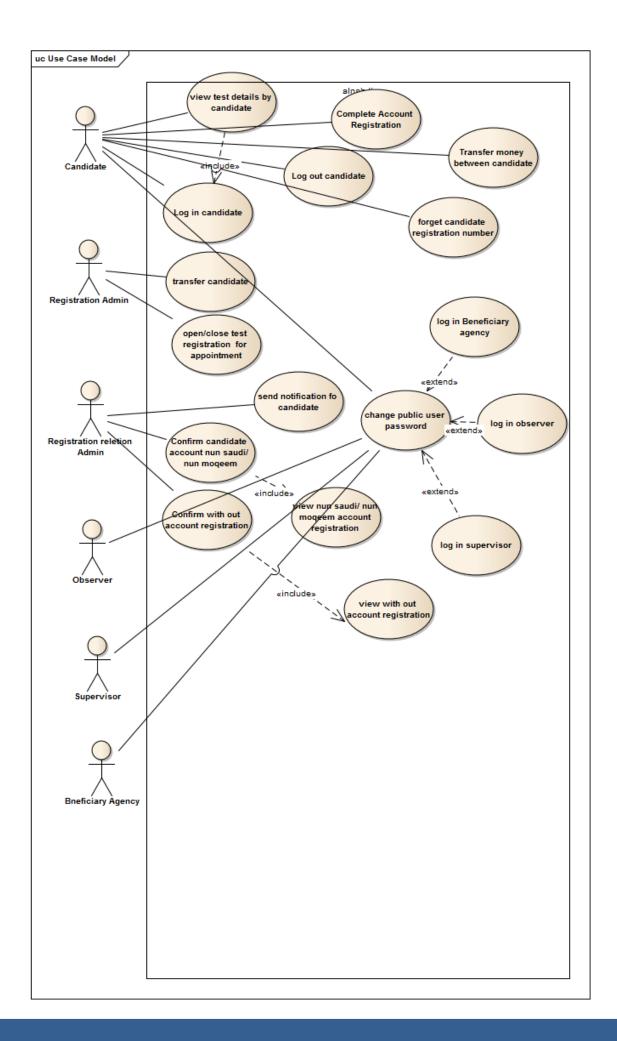
- Fail: An error message to be displayed to the user.
- Success:
  - Test Registration status for the selected test session should be displayed to the user successfully.

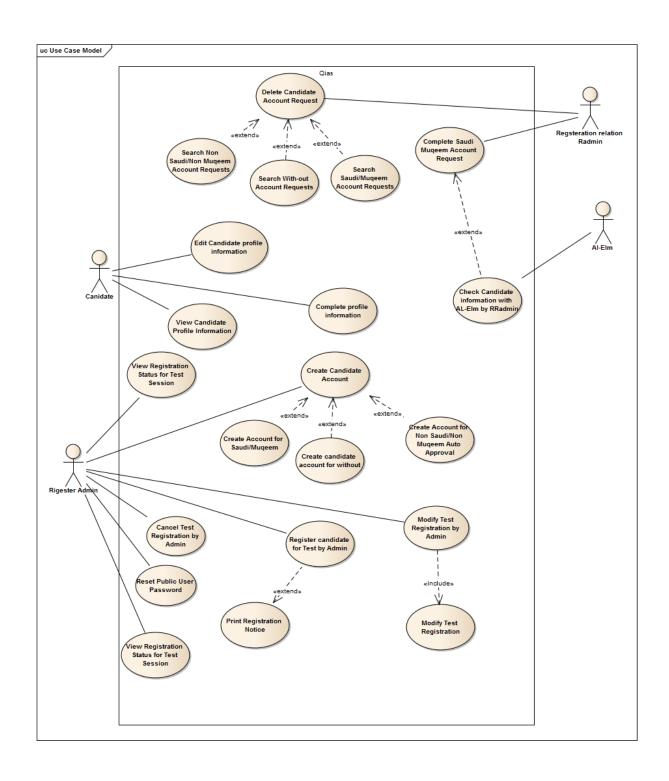
# 6 Use Case Diagrams





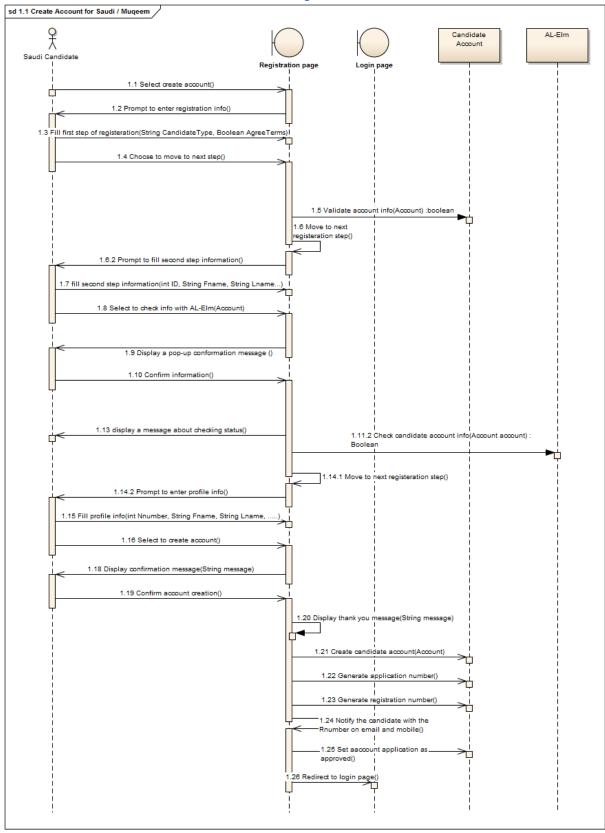




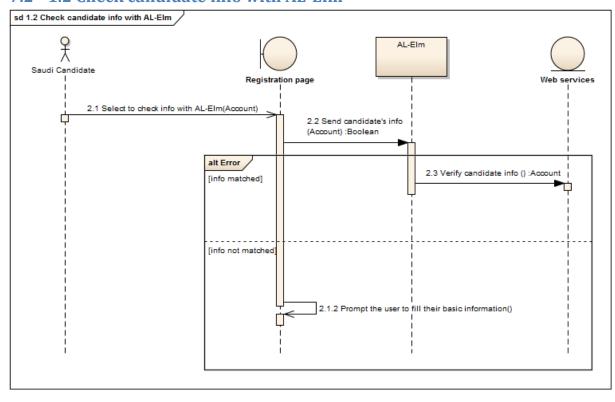


# 7 Sequence Diagrams

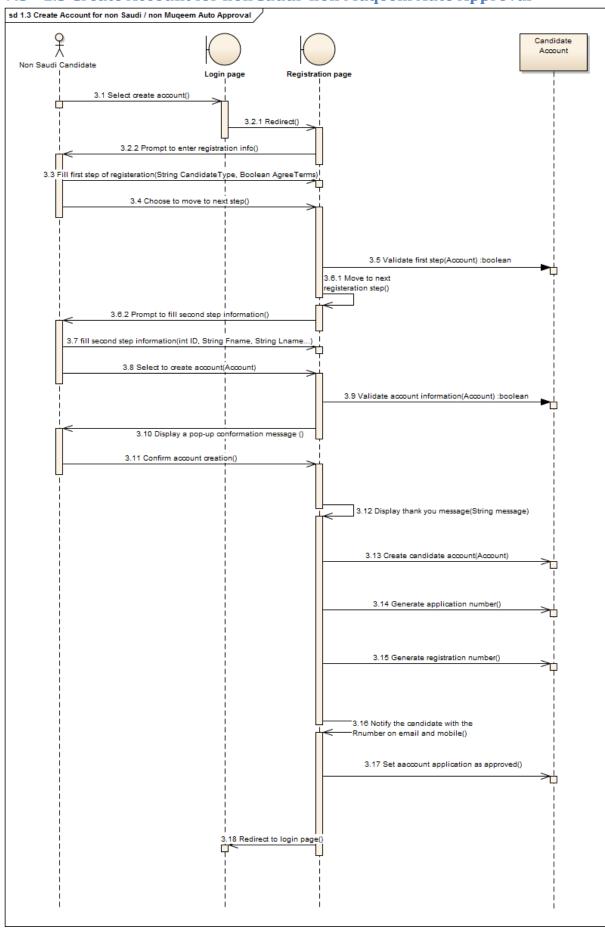
# 7.1 1.1 Create Account for Saudi Muqeem



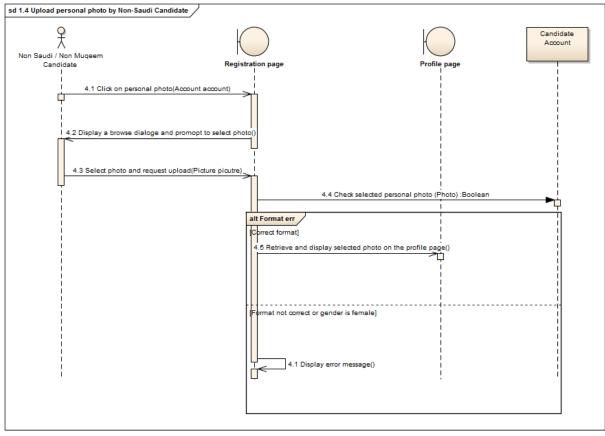
# 7.2 1.2 Check candidate info with AL-Elm



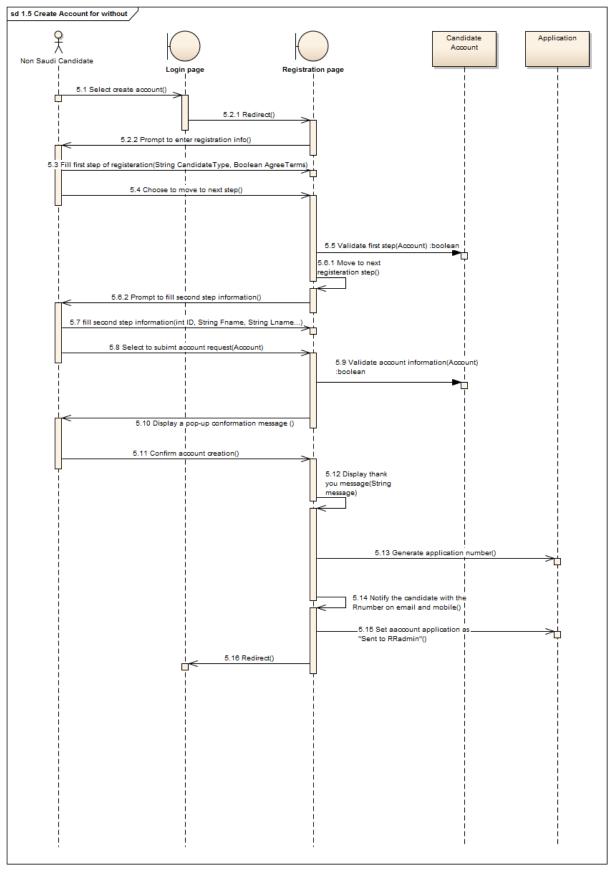
# 7.3 1.3 Create Account for non Saudi non Muqeem Auto Approval



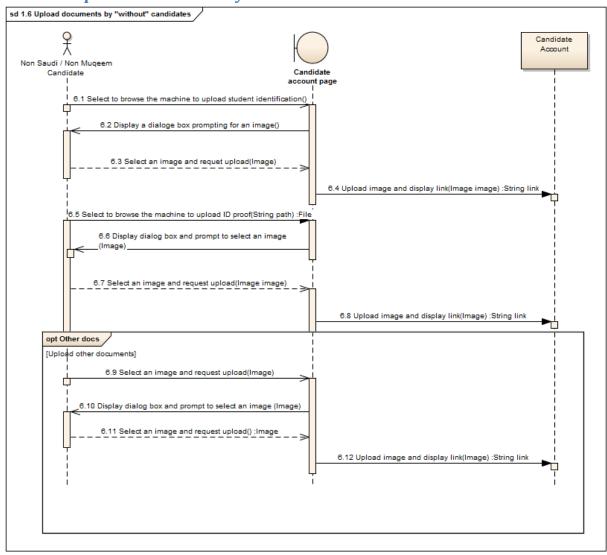
# 7.4 1.4 Upload personal photo by Non-Saudi Candidate



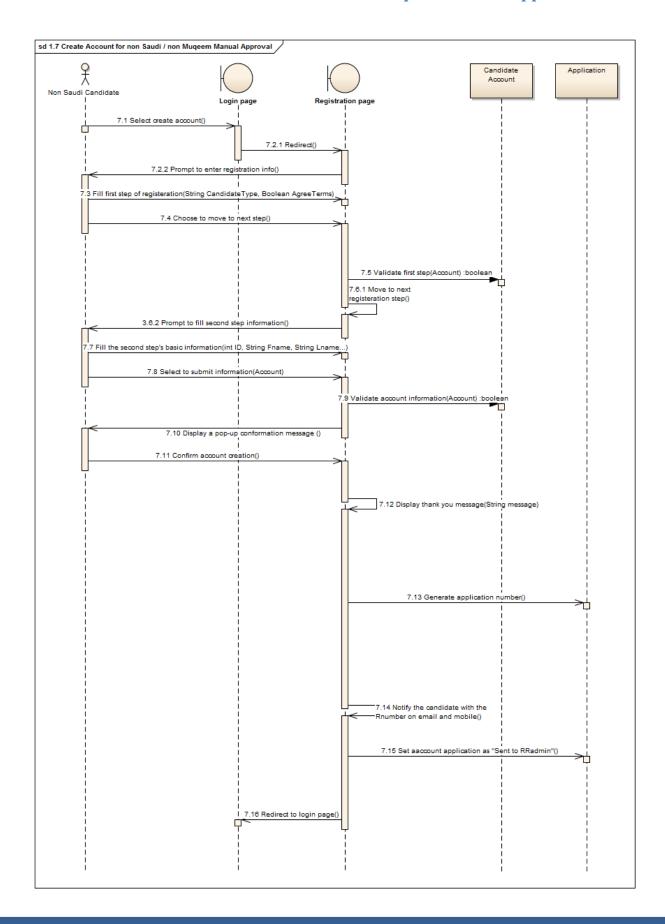
## 7.5 1.5 Create Account for without



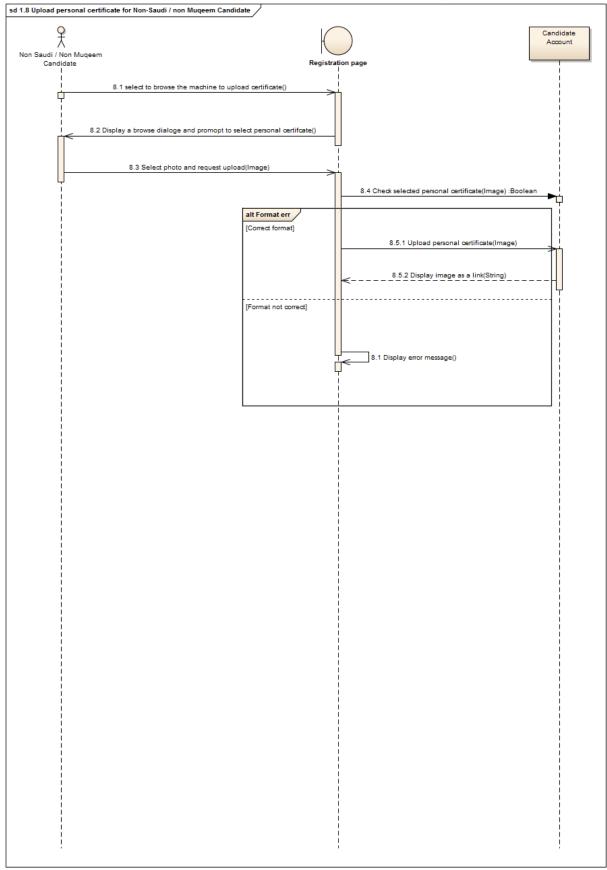
# 7.6 1.6 Upload documents by without candidates



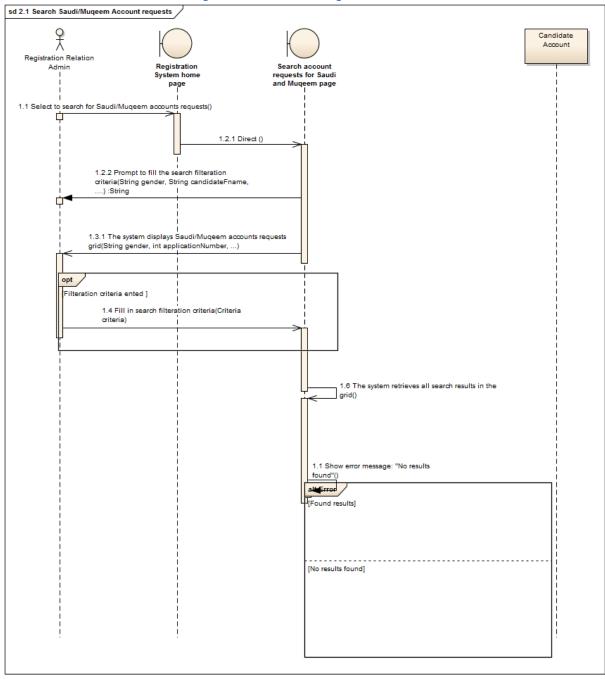
# 7.7 1.7 Create Account for non Saudi non Muqeem Manual Approval



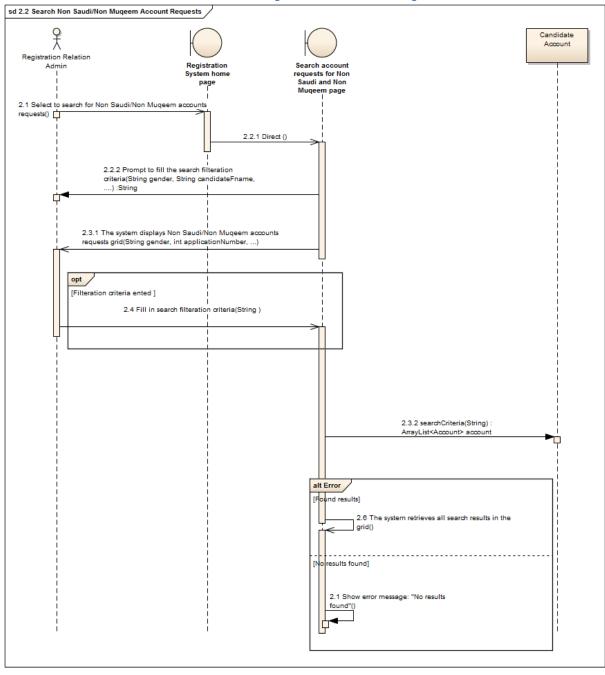
# 7.8 1.8 Upload personal certificate for Non-Saudi non Muqeem Candidate



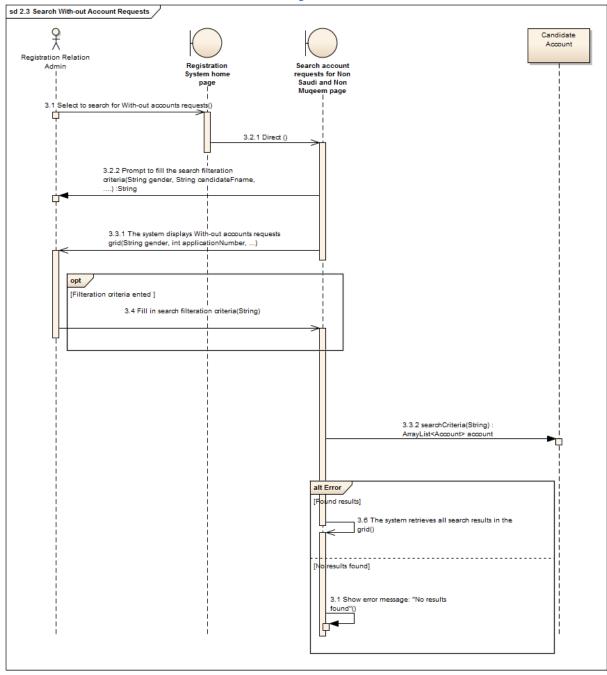
# 7.9 2.1 Search SaudiMuqeem Account requests



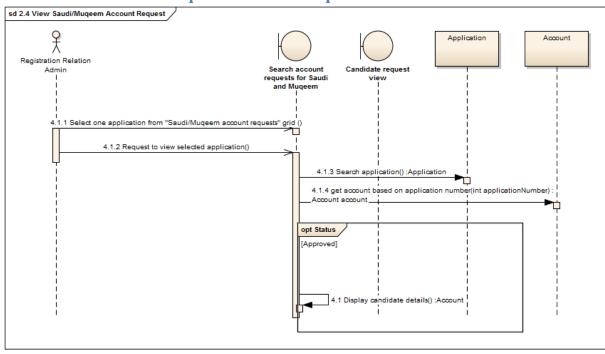
# 7.10 2.2 Search Non SaudiNon Muqeem Account Requests



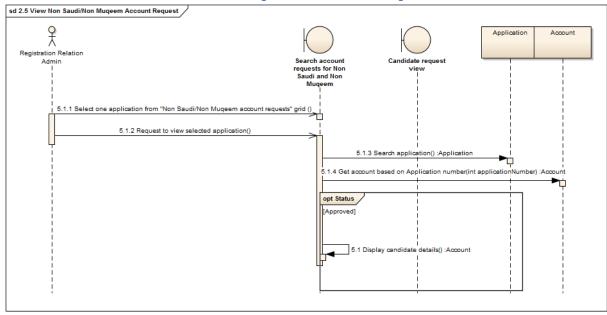
# 7.11 2.3 Search With-out Account Requests



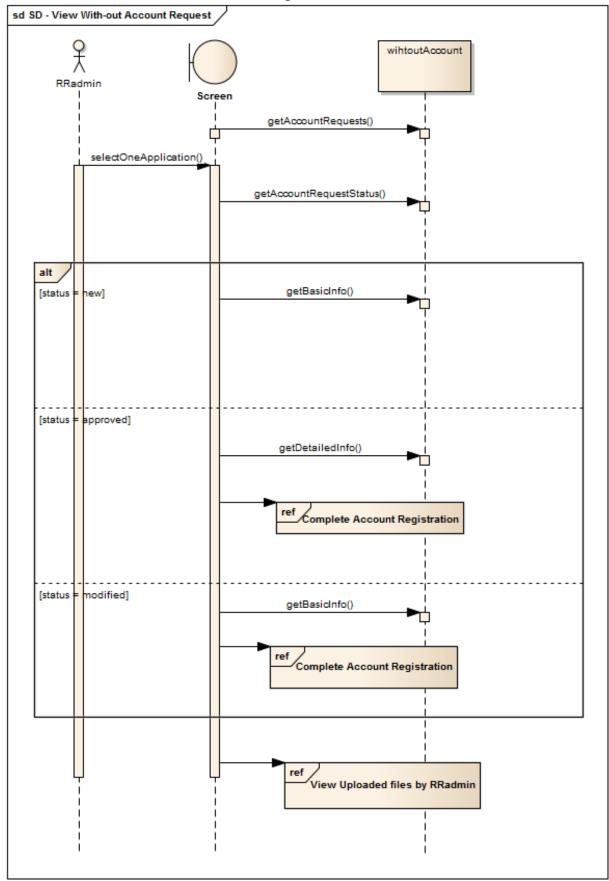
# **7.12 2.4 View SaudiMuqeem Account Request**



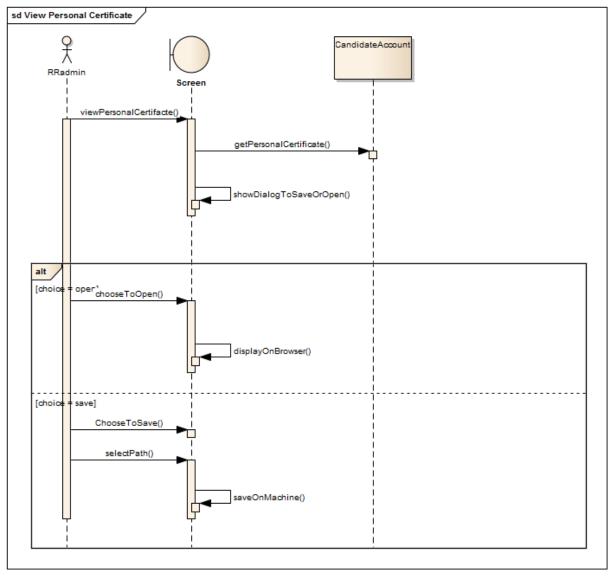
# **7.13 2.5 View Non SaudiNon Muqeem Account Request**



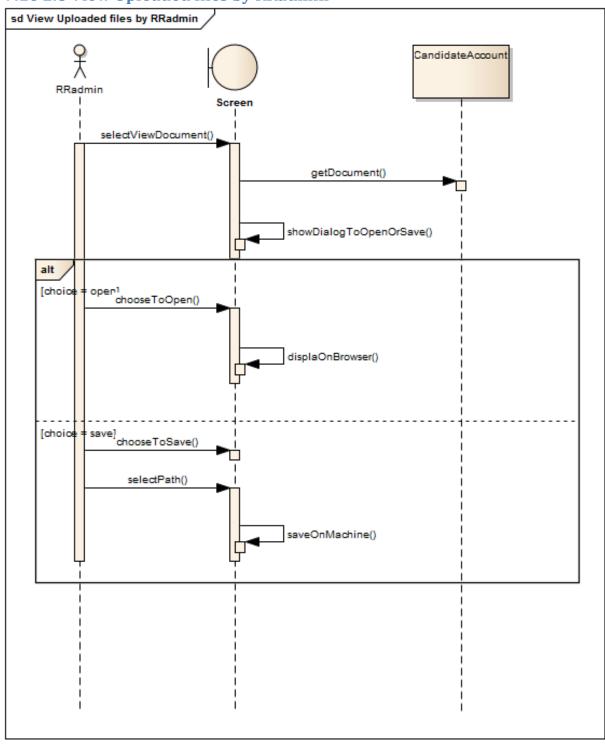
# 7.14 2.6 View With-out Account Request



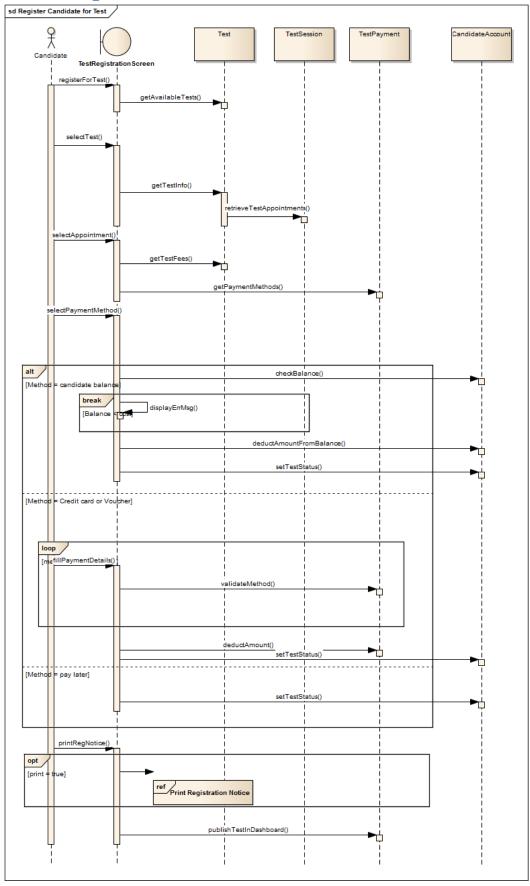
# 7.15 2.7 View Personal Certificate



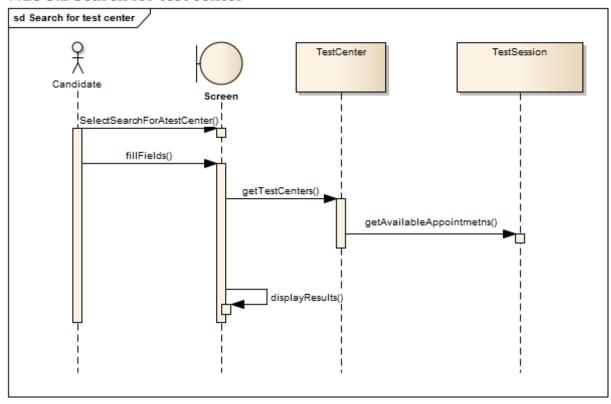
# 7.16 2.8 View Uploaded files by RRadmin



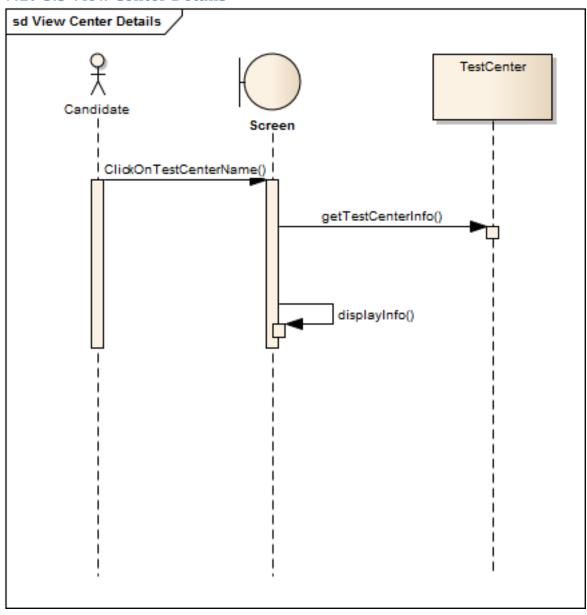
# 7.17 3.1 Register Candidate for Test



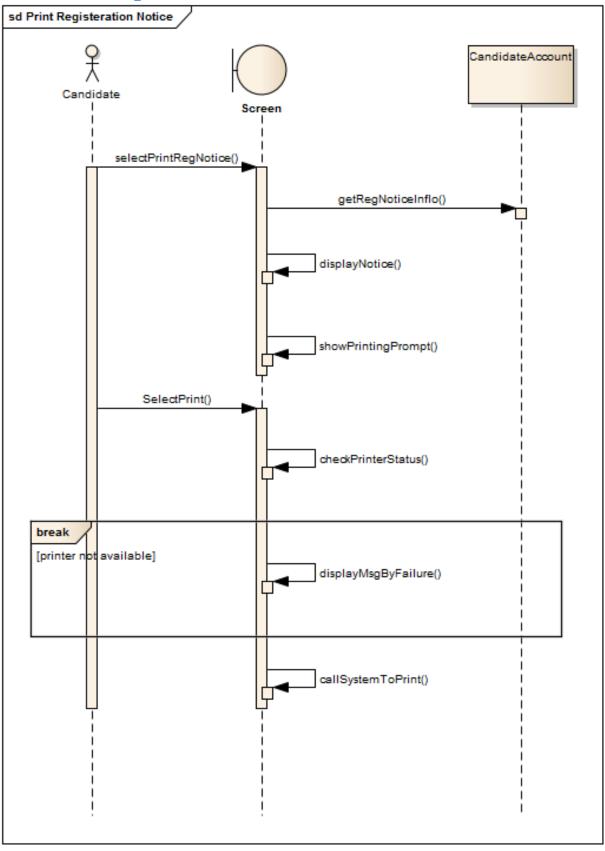
# 7.18 3.2 Search for test center



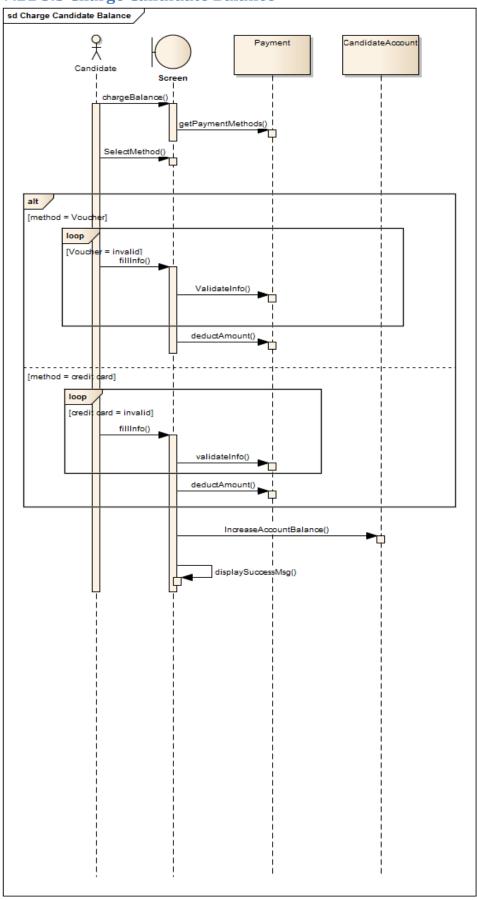
#### 7.19 3.3 View Center Details



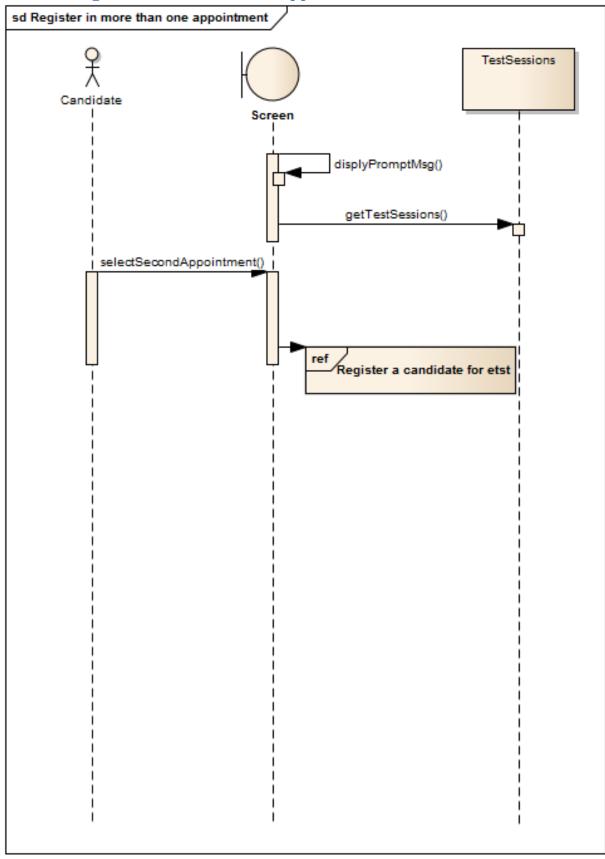
# **7.20 3.4 Print Registeration Notice**



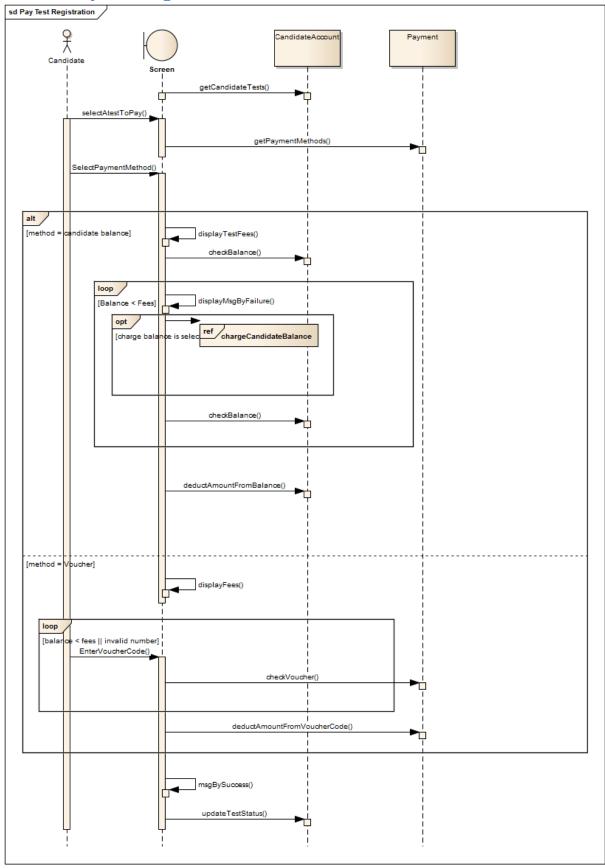
# 7.21 3.5 Charge Candidate Balance



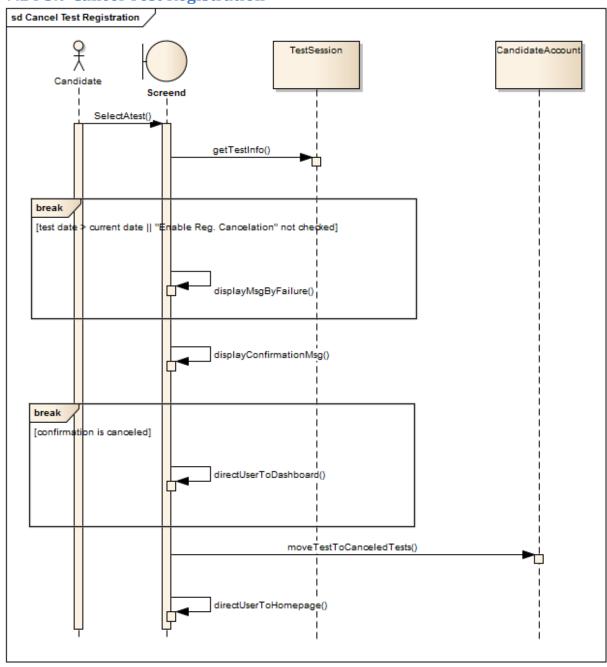
# 7.22 3.6 Register in more than one appointment



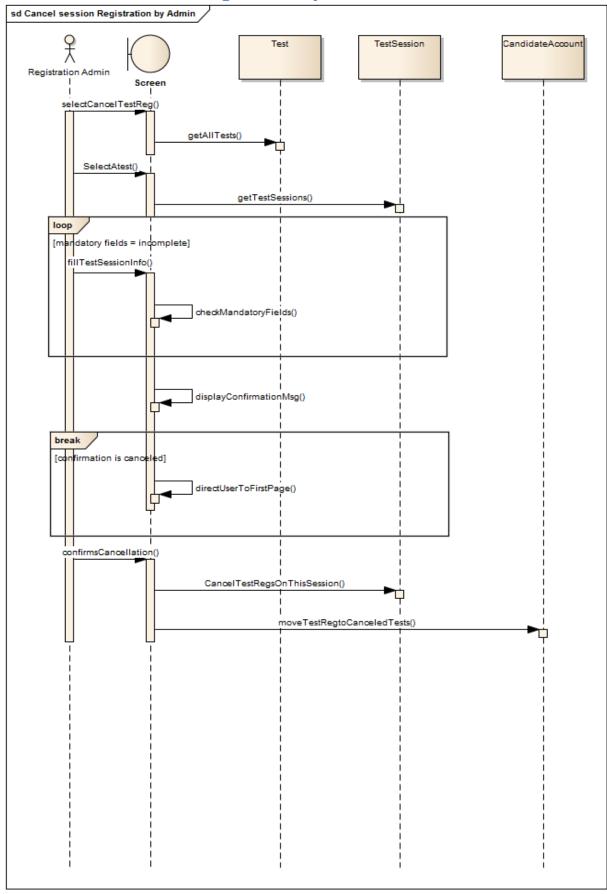
# 7.23 3.7 Pay Test Registration



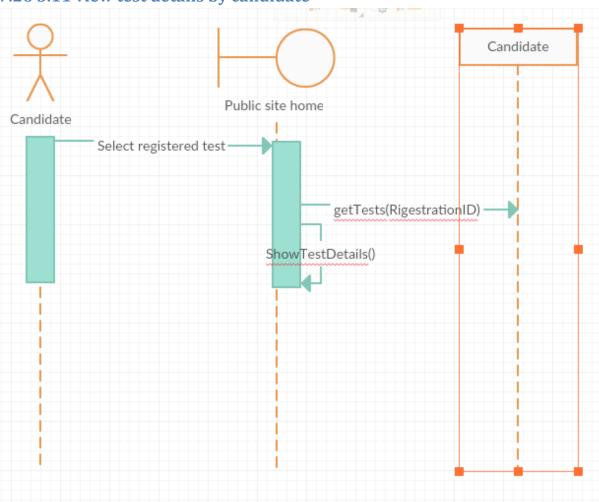
# 7.24 3.9 Cancel Test Registration



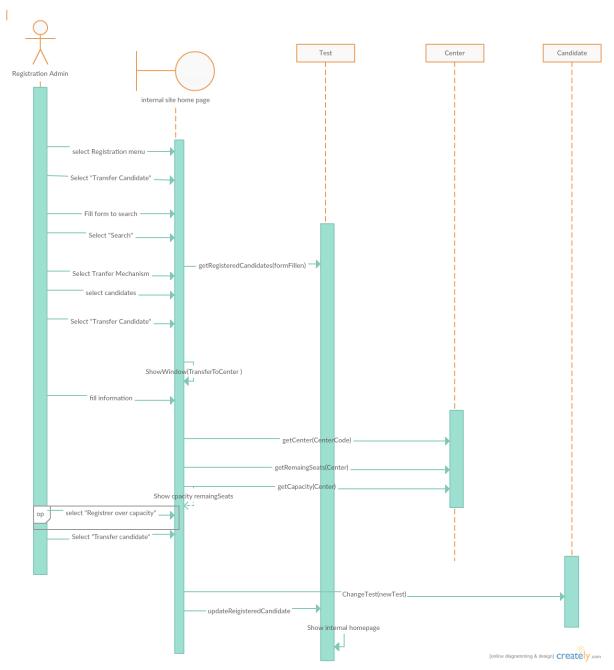
# 7.25 3.10 Cancel session Registration by Admin



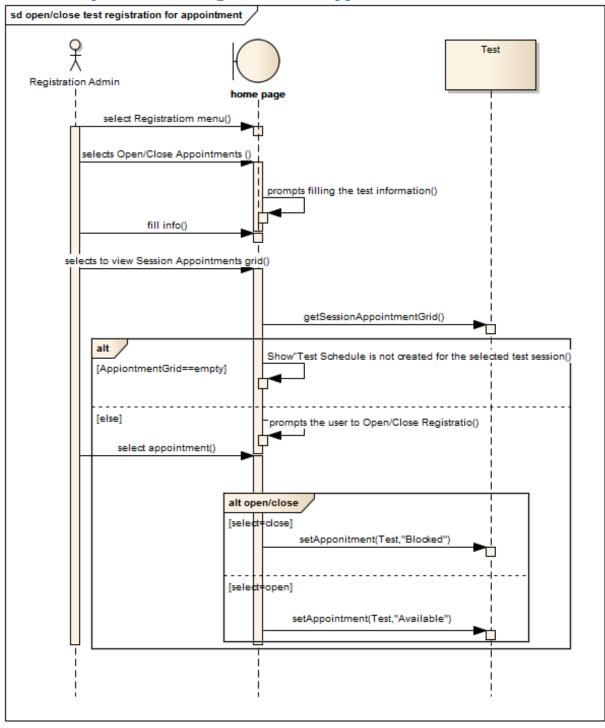
# 7.26 3.11 view test details by candidate



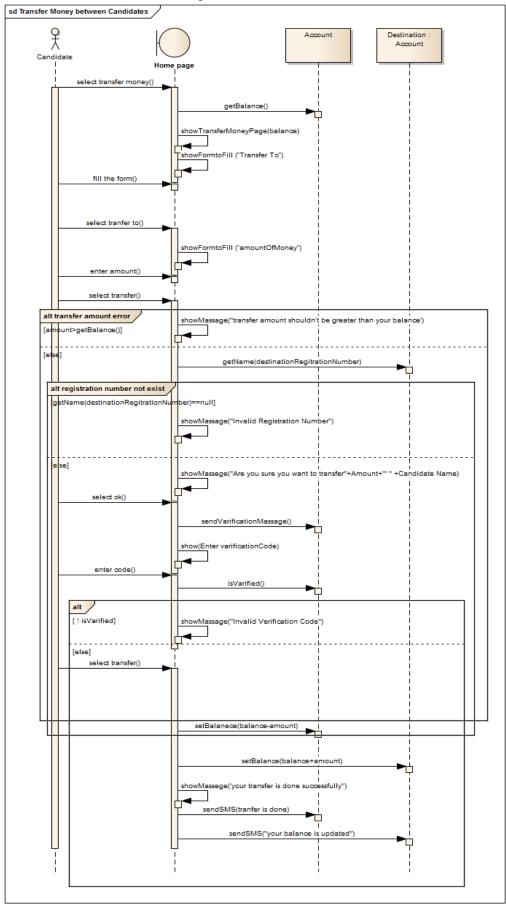
#### 7.27 3.12 Transfer candidate



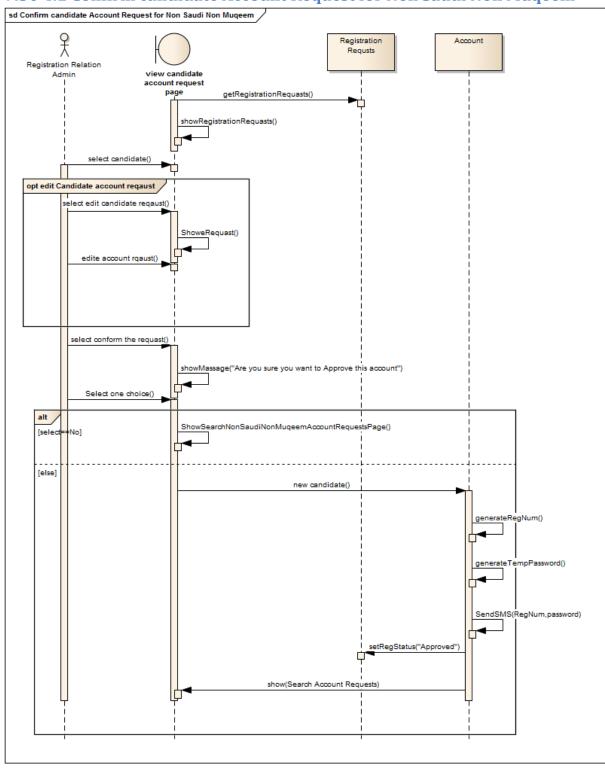
#### 7.28 3.13 openclose test registration for appointment



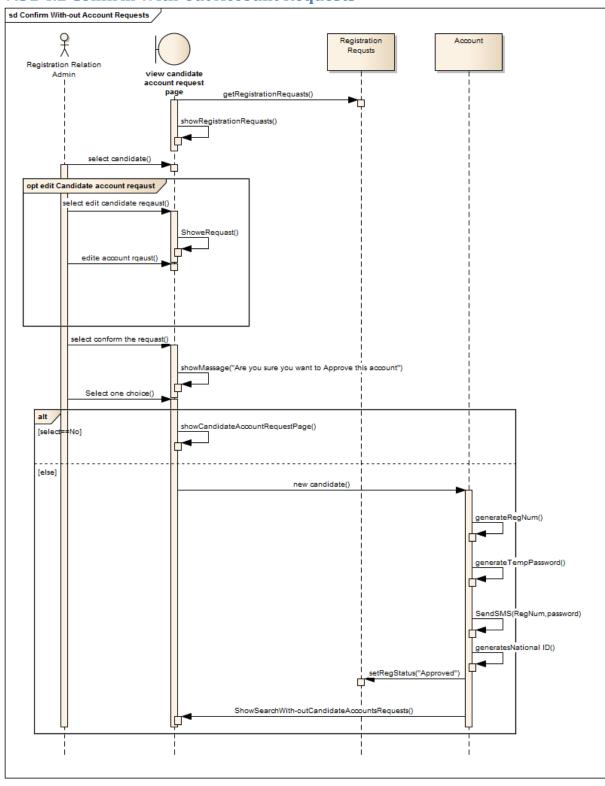
#### 7.29 3.14 Transfer Money between Candidates



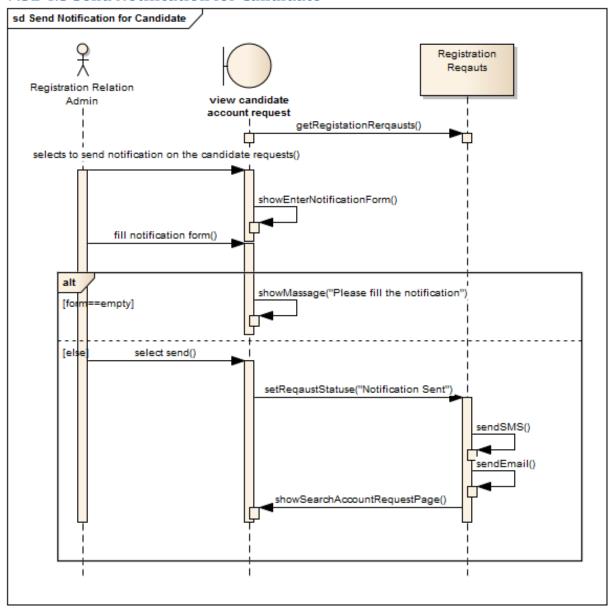
# 7.30 4.1 Confirm candidate Account Request for Non Saudi Non Muqeem



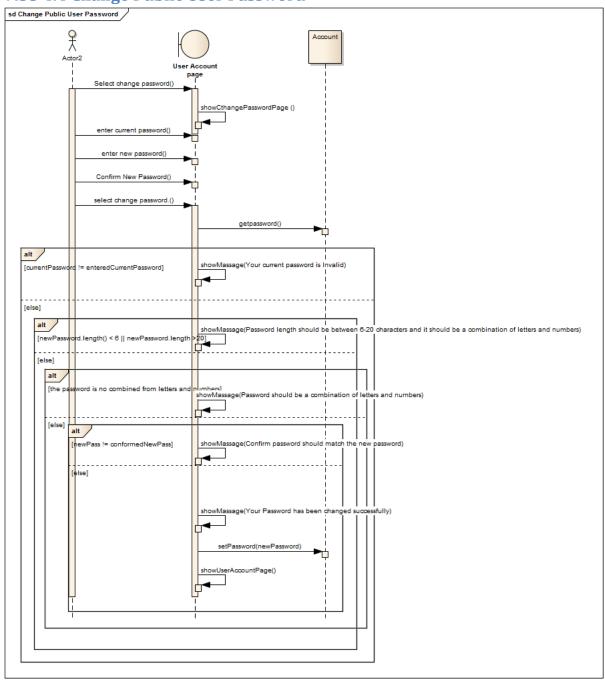
#### 7.31 4.2 Confirm With-out Account Requests



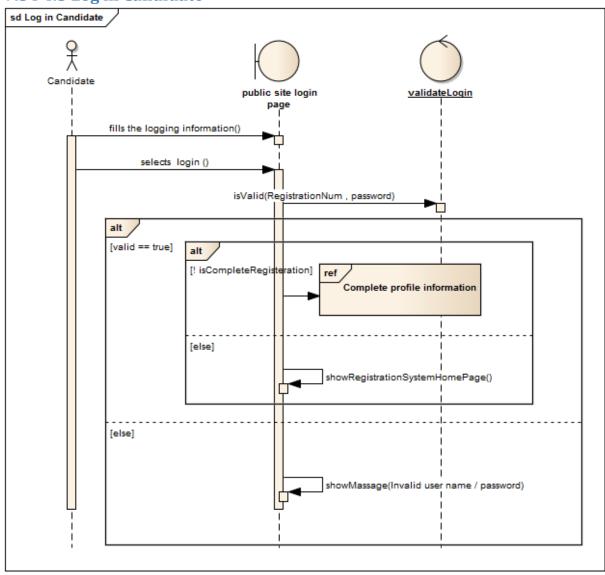
#### 7.32 4.3 Send Notification for Candidate



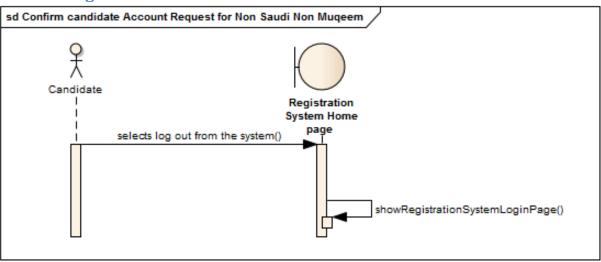
# 7.33 4.4 Change Public User Password



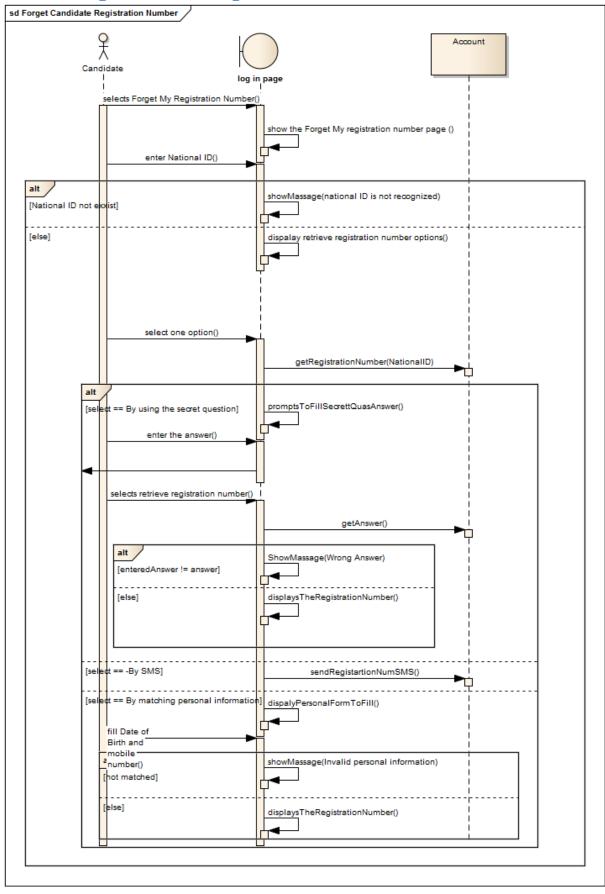
# 7.34 4.5 Log in Candidate



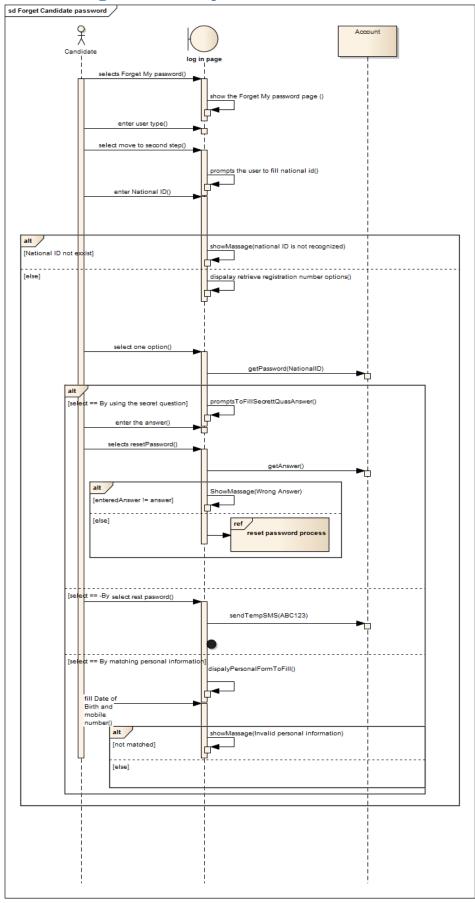
# 7.35 4.6 Log out candidate



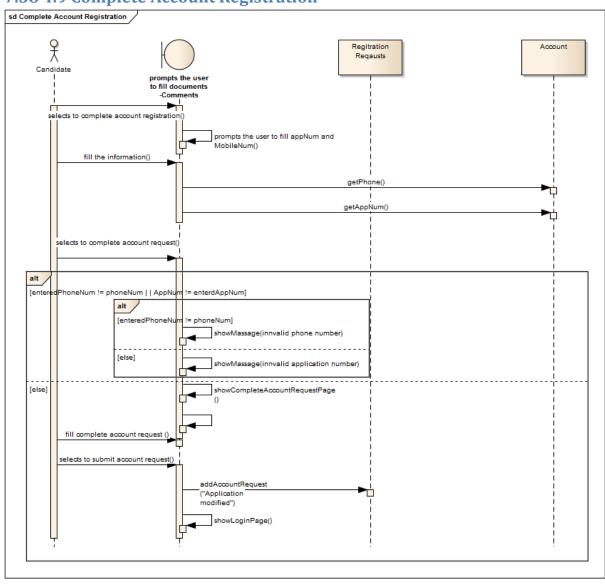
#### 7.36 4.7 Forget Candidate Registration Number



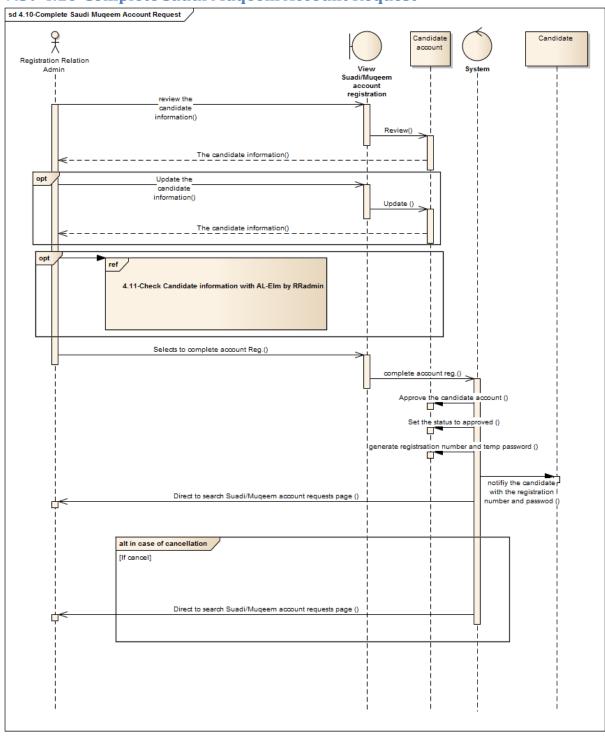
#### 7.37 4.8 Forget Candidate password



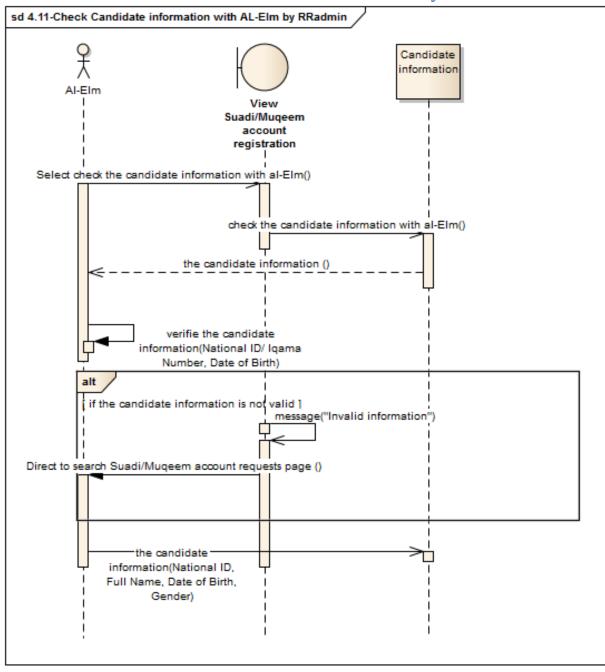
# 7.38 4.9 Complete Account Registration



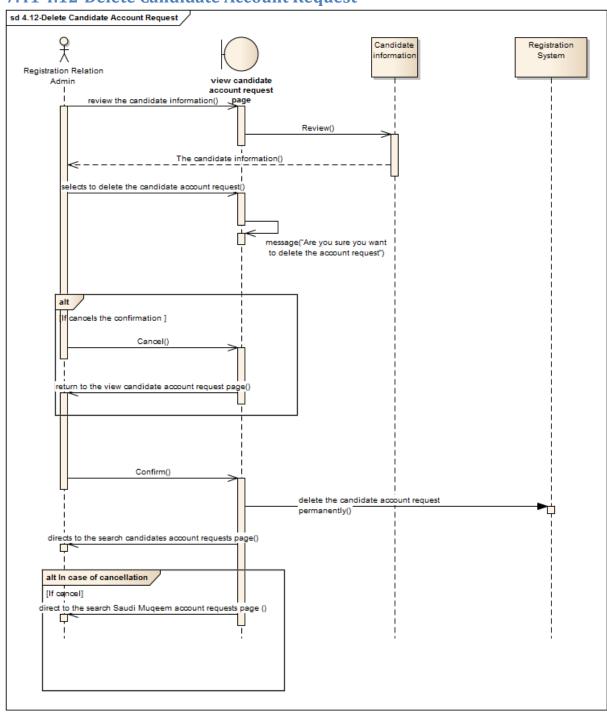
#### 7.39 4.10-Complete Saudi Muqeem Account Request



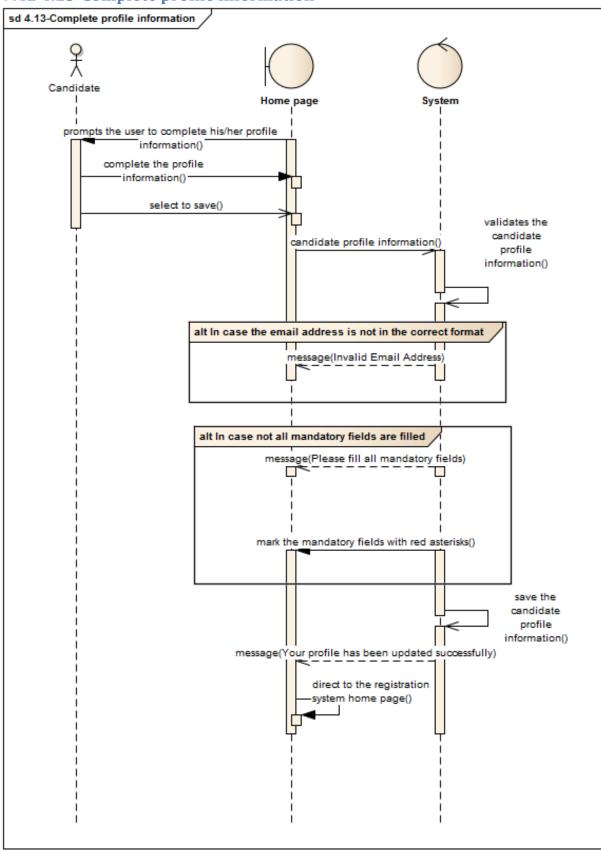
#### 7.40 4.11-Check Candidate information with AL-Elm by RRadmin



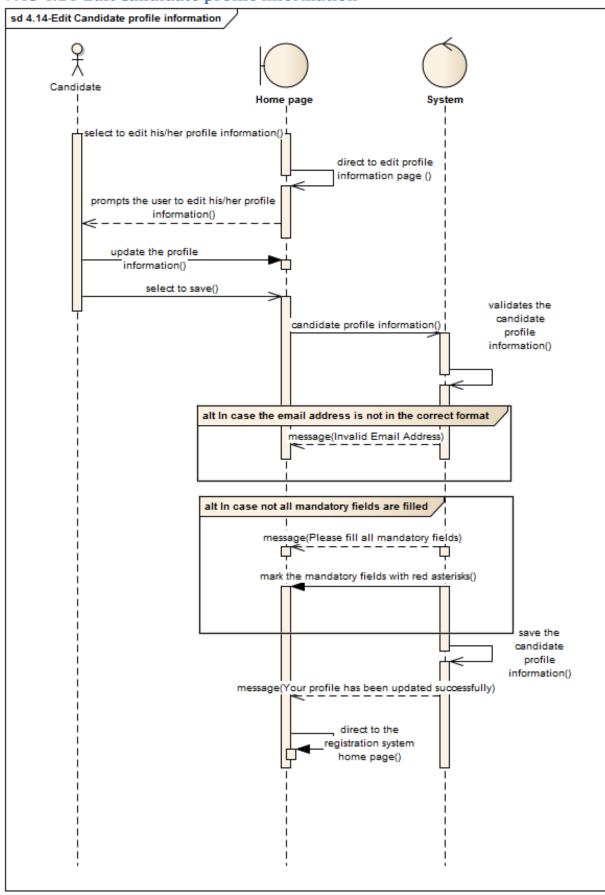
#### 7.41 4.12-Delete Candidate Account Request



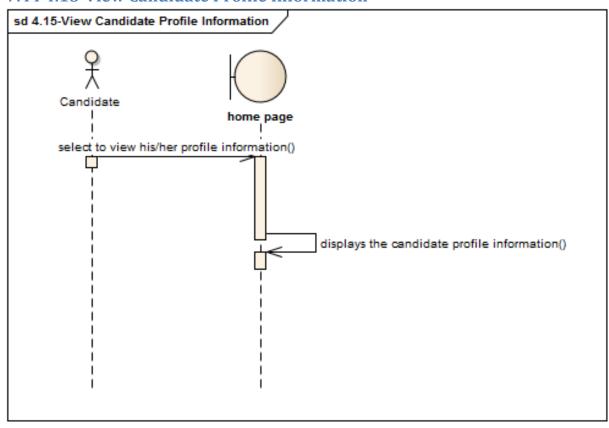
#### 7.42 4.13-Complete profile information



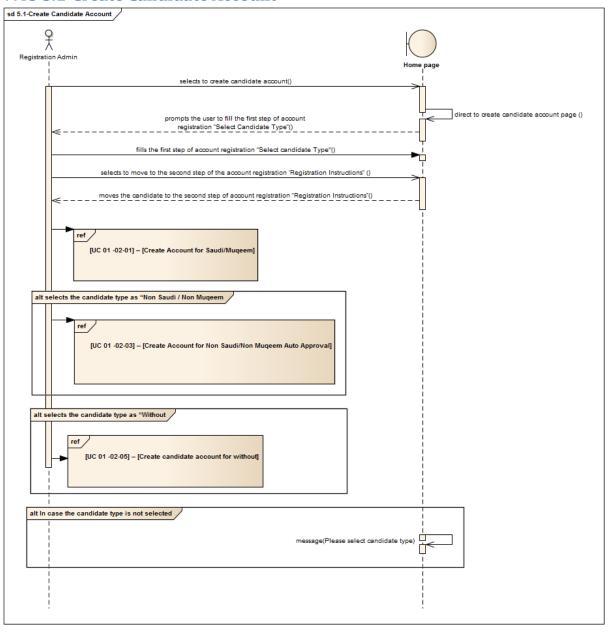
#### 7.43 4.14-Edit Candidate profile information



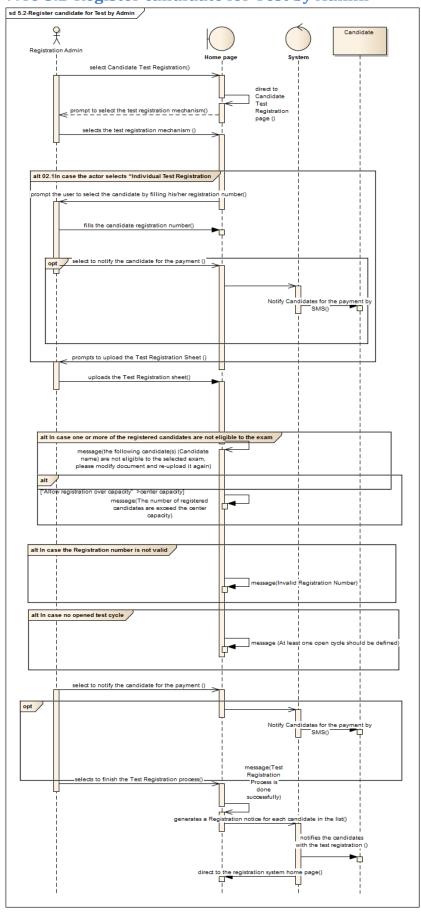
#### 7.44 4.15-View Candidate Profile Information



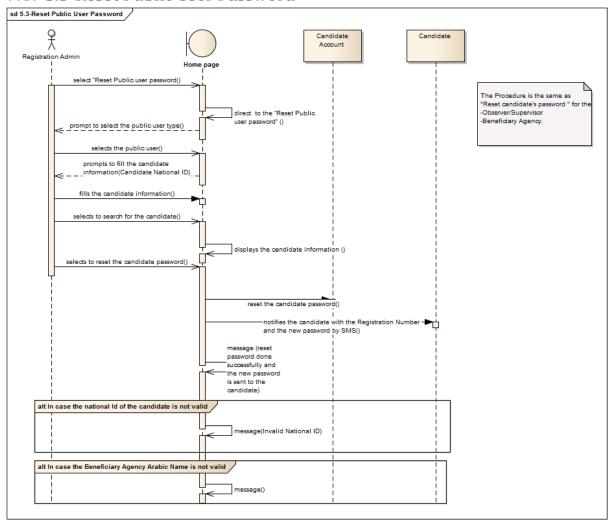
#### 7.45 5.1-Create Candidate Account



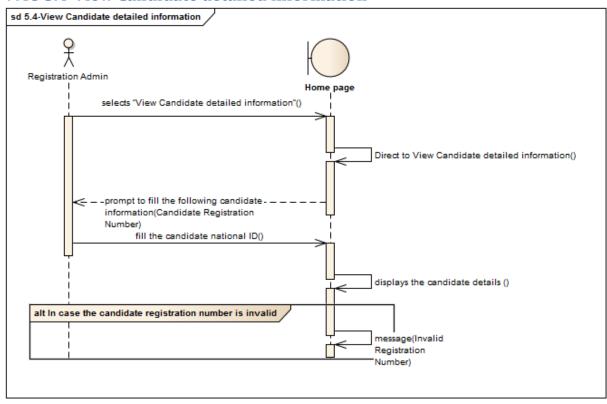
#### 7.46 5.2-Register candidate for Test by Admin



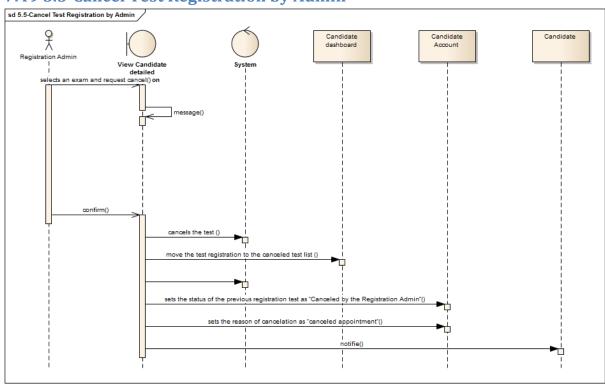
#### 7.47 5.3-Reset Public User Password



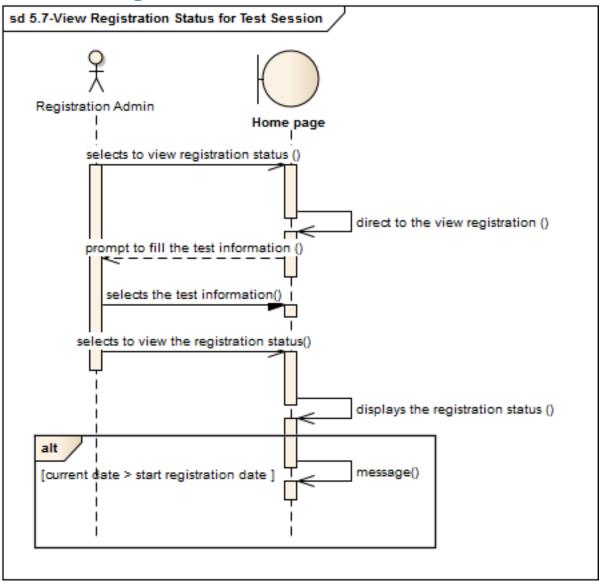
#### 7.48 5.4-View Candidate detailed information



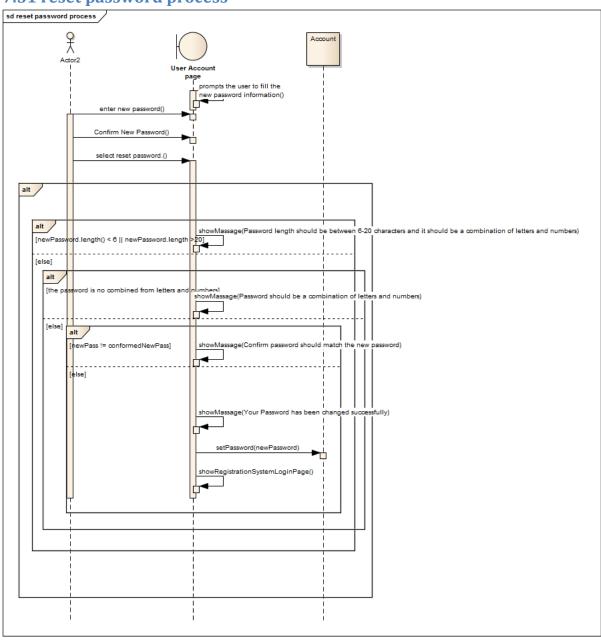
# 7.49 5.5-Cancel Test Registration by Admin



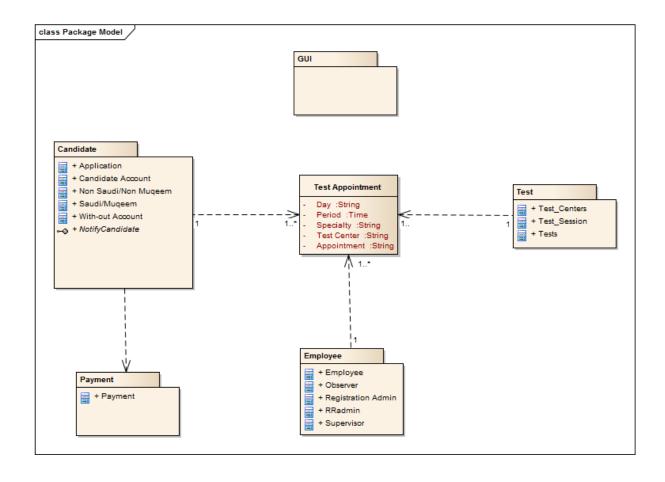
#### 7.50 5.7-View Registration Status for Test Session



# 7.51 reset password process

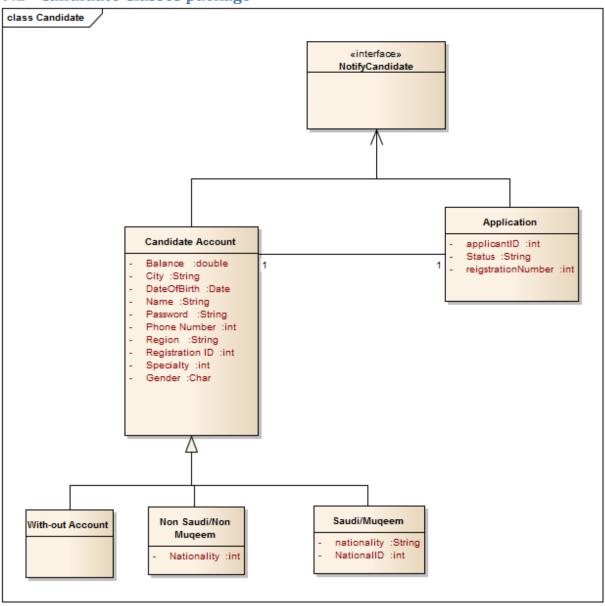


# 8 Package diagram

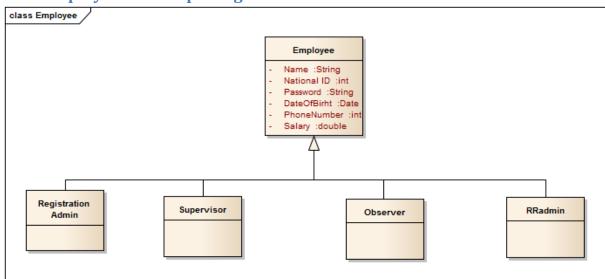


# 9 Class Diagrams

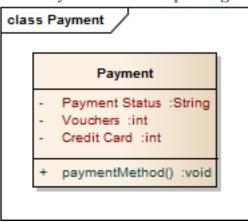
# 9.1 Candidate Classes package



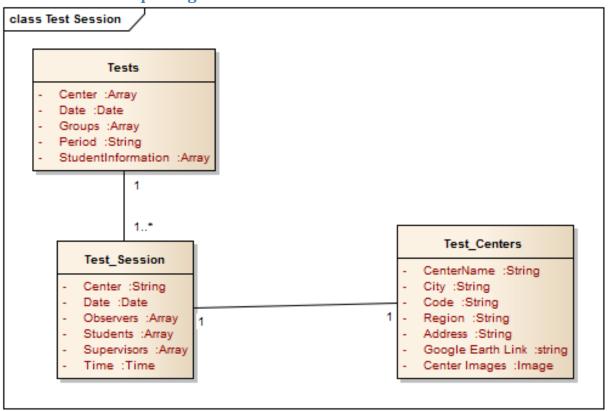
# 9.2 Employee Classes package



### 9.3 Payment Classes package



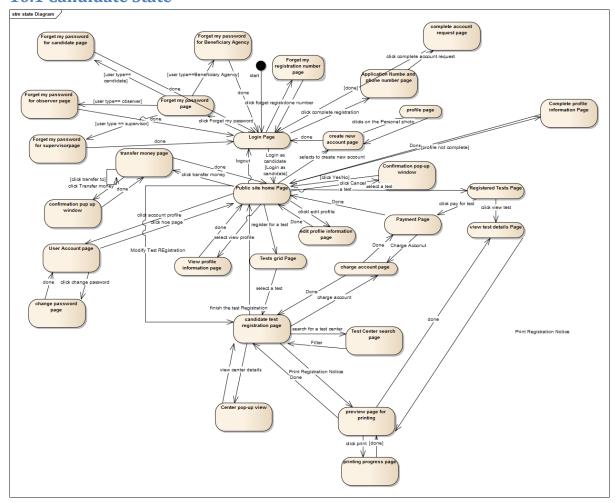
#### 9.4 Test Classes package



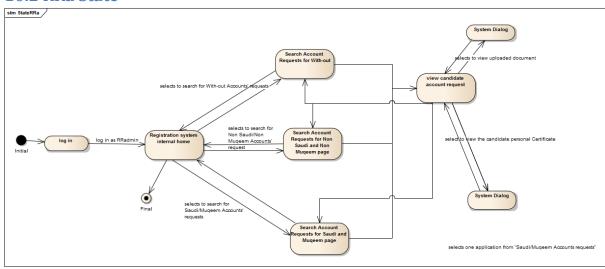
# 10 State Diagrams

\* **Note:** Each state diagram represents an actor's behavior

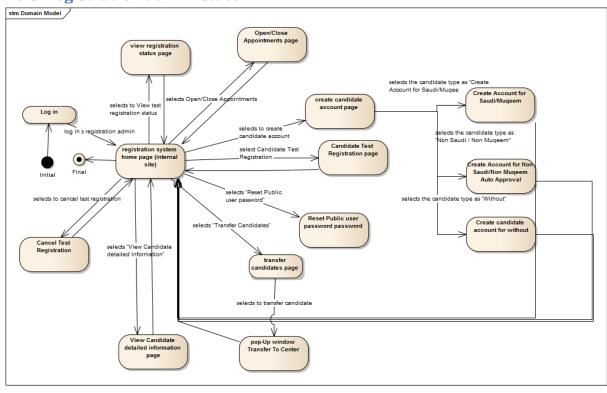
#### 10.1 Candidate State



#### 10.2 RRa State

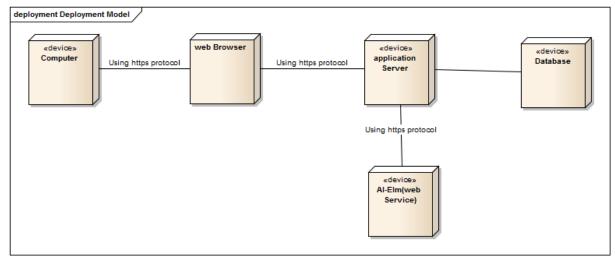


#### 10.3 Registration admin state



# 11 Deployment architecture

#### 11.1 Architecture Model



The application will be deployed on the web.

The web server should be able to meet the following specifications:

- Handle thousands of visitors per day.
- Handle hundreds of registration requests per day.
- Handle thousands of search queries per day.