

Requirements and Analysis 1

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Task1: Use Case Diagram

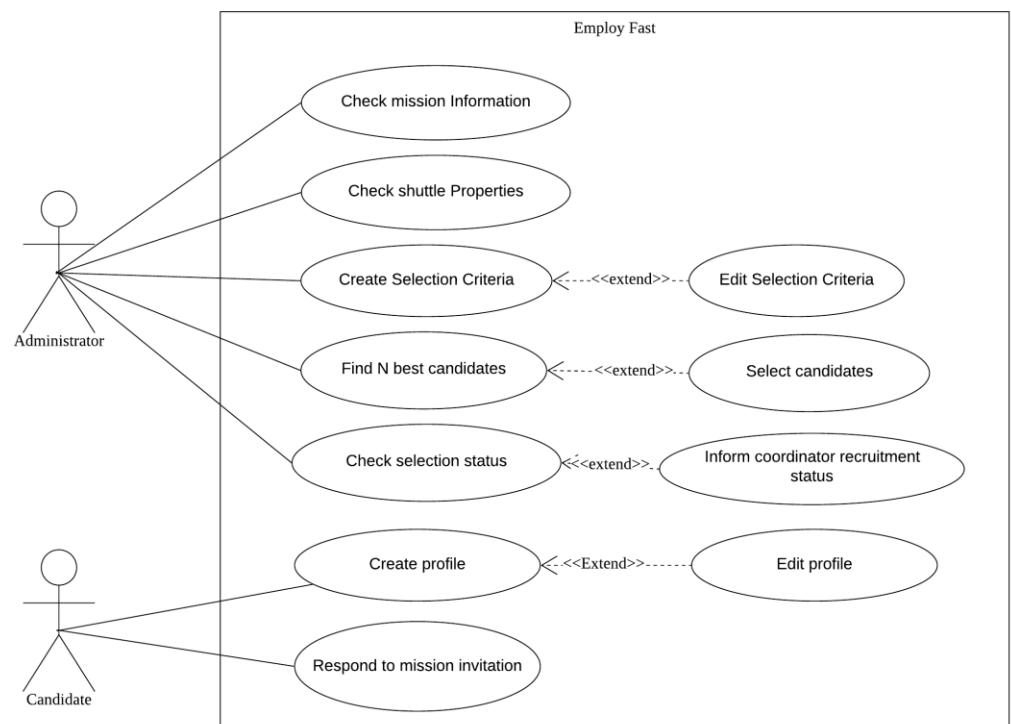


Figure 1. Employ Fast use case diagram

Task2: User stories and acceptance criteria

1. Use case: Check mission information

User story: As an administrator, I want to acquire the mission's employment requirements, so that I can create selection criteria based on these requirements.

Summary: This user story is independent as its logic is simple and have no direct relationship with other user story. It can be easily revised and changed following the clients' requirement. The value of it is to offer mission information including the employment requirements required by the users(administrators). The workload of this user story is small enough to be conducted within a few days and we can estimate how long we can finish it. And its function can be easily tested by whether the mission information is properly displayed.

Acceptance Criteria:

1. The administrator selects "Mission Information" and a view appears.
2. The view displays all missions managed by the administrator.
3. The administrator input the number of the mission he wants to check and a view appears.
4. The view displays all information of this mission including the employment requirements.

2. Use case: Check shuttle properties

User Story: As an administrator, I want to view properties of shuttle I have selected for a mission, so that I can read the detailed information of the shuttle for this mission.

Summary: This user story is independent because its function doesn't rely on the other user story. It is negotiable as it can be easily revised and changed. The value of it is to provide users(administrator) with detailed properties of the shuttle they want to view, which is necessary and beneficial to them. The workload of this user story is small enough to be conducted within a few days and we can estimate how long we can finish it.

Acceptance Criteria:

1. The administrator selects “View Shuttle Properties” and a view appears.
2. This view displays a list of all shuttle which have selected by the administrator.
3. The administrator inputs the number of the shuttle he wants to view and a view appears.
4. This view displays all properties of the shuttle selected by the administrator.

3. Use case: Create selection criteria

User story: As an administrator, I want to be able to choose the criteria from the list on the page so that I can view the various conditions and can exactly create specific criteria.

Summary: This user story could be executed independently and perhaps does not need other user stories to support it. It is also replaceable for this use case to create selection criteria. The value of this user story is that it could save much time and make the criteria more accurate. At the same time, it is estimable and testable because the function’s outcome is to show the list and successfully select the option. Obviously, this user story is detailed enough to be small, so we are able to think about it separately.

Acceptance Criteria:

1. The administrator selects ‘show a list’ and this view will appear.
2. This view will show options which could be chosen to be a criterion
3. After choosing options for each part, the administrator should confirm that to finish the creation of selection criteria.

4. Use case: Edit selection criteria

User story: As an administrator, I want to be able to add, remove or change the selection criteria so that I can adjust them to find more candidates if those are not enough.

Summary: This user story is independent enough to be implemented. And it can be replaced by other stories to reach the requirement which means it is negotiable. It provides enough candidates to be selected which helps administrator to complete their selection work, so it is much valuable. After editing criteria, we are able to find that there are exactly N candidates to be selected. Obviously, the selection outcome has changed comparing to insufficient candidates. This shows that this user story is much estimable and testable. Also, it is easy to be implemented and managed because it is small enough.

Acceptance Criteria:

1. The administrator selects 'edit selection criteria' and this view will appear
2. This view will show all criteria which have been created
3. The administrator selects the specific one to edit
4. After editing, the view will display the updated selection criteria

5. Use case: Find N best candidates

User Story: As an administrator, I want to find the first N number of best candidates for a title, so that I can add those best candidates into the mission.

Summary: This user story describes the action of finding the N best candidates for a title in a mission, which is entirely self-contained. It can be easily revised and changed following the clients' requirement. The value of it is to help the users(administrators) to list suitable candidates for a mission. This user story is small enough to develop in several days. And its function can be easily tested by whether the required candidates are listed properly.

Acceptance Criteria:

1. The administrator selects "Find N best candidates" and a view appears.
2. The view lists the all missions managed by the administrator.
3. The administrator enters the mission number he wants to select candidate and a view appears.
4. The view lists all titles in this mission.
5. The administrator selected the title he wants to find candidates for and a view appears.
6. The views list the first N number of best candidates for this title.

6. Use case: Select the candidate

User story: As an administrator, I want to be able to view the detailed information of candidates so that I can judge which one is more suitable when several people have similar conditions.

Summary: This user story is independent because it could be implemented directly and does not depend on other user stories. Meanwhile, it is negotiable that we are able to switch to another story to achieve the goal. Absolutely, this user story is valuable for end users to be more convenient to select candidates. It is also easy to estimate the implementation effort which just needs to display the information. And it is small because we could not split it into smaller stories and it could be scheduled

independently. Finally, this user story could be tested to check if it contributes to decide the candidates by comparing two more similar candidates.

Acceptance Criteria:

1. The administrator selects 'view candidate details' and this view will appear
2. This view will show candidates' information
3. After reading, the administrator selects candidates which are more suitable for the mission.
4. The administrator selects 'select candidates' to confirm that.

7. Use case: Check selection status

User story: As an administrator, I want to check the selection status of candidates so that I can know whether the candidates accept or reject the selection and whether the recruitment is finished.

Summary: This user story describes the action of checking the selection status of one mission, which is entirely self-contained. It can be easily revised and changed following the clients' requirement. The value of it is to help the users(administrators) to know the candidates' respond to the selection and whether the recruitment is finished. And its function can be easily tested by whether the selection status will show properly.

Acceptance Criteria:

1. The administrator selects "Check selection status" and this view will appear
2. The view lists the all missions managed by the administrator.
3. The administrator enters the mission number he wants to check its selection status and a view will appear.
4. This view list all responds from candidates of this mission, including acceptance and rejection.
5. If all candidates of this mission accept their selections, this view will indicate that the recruitment is finished.

8. Use case: Inform coordinator recruitment status

User story: As an administrator, I want to be able to click an informing button in the candidate details interface to send the notification to the coordinator after finishing

recruitment so that I can directly inform them rather than switching pages to find contact methods.

Summary: This user story is independent because it does not need a backer to assist its implementation. And we can change or rewrite it to inform the coordinator because it is not unique. However, it could improve the efficiency to finalise the recruitment and send a notification to the coordinator which is profitable for end users. It is convenient to estimate and test whether the notification has been sent to the coordinator. Clicking button to send a message is a simple action which means it is small enough to be executed.

Acceptance Criteria:

1. The administrator selects “inform coordinator” and this view will appear
2. This view asks the administrator to confirm to send a message to the relevant coordinator.
3. After confirmation, the view will show the successful page.

9. Use Case: Create profile

User Story: As a candidate, I want to create candidate profile so that I can register as candidate to attend mission to Mars.

Summary: This user story is independent because it could be implemented independently, and it doesn't rely on other use case. In addition, this user story is valuable for end user because this process is inevitable to collect user information for next procedure in project. This user story is estimable because user information must be collected in this software, and use information needs to correspond to functionality for implementation effort. Besides, this user story is small because user only needs to fill 15 attributes in this procedure which is scheduled independently. And this user story is testable. User could check if their information is already existing in system or not.

Acceptance Criteria:

1. A new and blank candidate information page needs to come up when user choose to create candidate profile.
2. There are 15 attributes totally from name to email address that user needs to fill in.
3. They are all in text-based application, so user need to fill in one by one in sequence.

4. After user complete all the attributes, a message will come up to ask user whether him/she submit his/her filling information or not.

10. Use Case: Edit profile

User Story: As a candidate, I want to edit candidate profile so that I can update my information just in case of change on my information.

Summary: This user story is not absolute independent because only if there is an existing user information, that user has the access to edit his/her information. And this user story is valuable for end users. This software needs a function that allows user to edit his/her information just in case that they change their information in real world so that they could edit in software to match. So, end user makes their information correct and accurate. Meanwhile, this user story is small because end user only needs to edit his/her information or doesn't do anything at all, and this use case is independent from other use case despite create profile. This use case is testable because user can try this function to edit his/her information. After user tries to edit information, he/she could edit back.

Acceptance Criteria:

1. The user information displayed must be the same as user input.
2. There must be 17 attributes in edit page which has two more attributes than create page.
3. Criminal and health records cannot be changed.
4. Criminal and health must be displayed in edit page after the user create his/her candidate profile.

11. Use Case: Respond to mission invitation

User Story: As a candidate, I want to accept or deny the mission invitation so that I can decide to accept or not based on my own willing

Summary: This user story is not absolute independent it depends on whether administrator send invitation or not. Since it only depends on one condition, it can be considered independent. This user story is valuable for end user because only if they accept mission invitation, they will be selected to do the mission. This user story is small because in this function user only can view the mission information and make choice to accept or deny the mission.

Acceptance Criteria:

1. User can access mission detail.
2. There are totally 8 attributes in mission detail.
3. In this page, user can accept invitation by entering 1 or deny by entering
4. A message must come up to show the status after user makes the choice.