



CSE307: System Analysis & Design

Project: Automated System for Land Registration for Sub Register Office.

Assignment 2

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Information Gathering methods used for the Project:

Interviewing

1. Interviews are a good way to collect information for building this system.
2. Activities carried out: We selected different employees from different departments of the sub-registry offices to come to the office to register, sell or buy, pay taxes and ask them about the challenges they face in registering, selling or buying lands, Tax payment and public hearings. We are trying to understand what kind of functionality the system should have. Interviewing people from different departments and office workers plays a key role in breaking down prejudices and better understanding user needs.

Questionnaires

Activities carried out: We offer a variety of open-ended and closed-question surveys. The question needs to be thoroughly scrutinized and determined to extract the correct data we are looking for. Answers are not yes or no and can follow varying levels of agreement or disagreement. This leads to better understanding and encourages participants to provide more accurate answers.

Join Application Design(JAD)

I. Introduction

The scheme is intended to serve an entire group of sub-register employees rather than an individual or single group. Therefore, JAD can be a good approach for gathering information about user requirements.

II. Activities performed

We have conducted many group conversations with various user categories and solicited their input on the functions that the system should provide. We also looked at how different users have different needs. We outlined the needs in accordance with these problems.

Use Case Diagram



Normal Scenario for 2 Use Cases:

Use Case Name: Land Registration	
Area: Sub Register Office	
Actor(s): Citizen	
Stakeholders: Citizen, Customer	
Level: Blue	
Description: Online Land Registration for land and generate an online copy of land registration.	
Triggering Event: Land Registration button is clicked	
Trigger Type: External	
Steps Performed(Main Path)	Information for Steps
1. Login to the system.	Username & password, designation.
2. Click on the Land Registration Online Button.	
3. Enter the Record of Right copy ID.	Record of Right ID
4. Enter the mutation of property ID.	Mutation ID
5. Enter the Non-Encumbrance Certificate ID.	Non-Encumbrance Certificate ID
6. Enter the amount of tax of the land.	Tax amount
7. Enter the Name of the owner of land.	Land Owner Name
8. After clicking the "Done" button, registration is processed.	
9. Produce an online registration copy.	
Preconditions: User has to be registered in this system with his/her NID or birth certificate and fill up all necessary information.	
Postconditions: Registration information has been added to the database and online	

registration copies have been generated.
Error Condition: If the Record of Right copy ID or mutation ID or Non-Encumbrance Certificate ID is not valid, then the user will be notified.
Assumptions: User has successfully logged on with access to Land Registration Online system.
Success Guarantee: Registration information has been added to the database and required reports printed.
Minimum Guarantee: Registration information has been added to the database and required reports will be printed later.
Objectives Met: Online land registration.
Outstanding Issue: What course of action should be taken when required information is missing.
Priority (optional): High
Risk (optional): Medium

Use Case 2:

Use Case Name: Create advertisement for Land selling.	
Area: Sub Register Office	
Actor(s): Citizen	
Stakeholders: Citizen, Customer	
Level: Blue	
Description: Create advertisements for Land selling online.	
Triggering Event: Create advertisements button is clicked.	
Trigger Type: External	
Steps Performed(Main Path)	Information for Steps
1. Login to the system.	Username & password, designation.
2. Click on the Create advertisements button.	

3. Enter the Record of Right copy ID.	Record of Right ID
4. Enter the mutation of property ID.	Mutation ID
5. Enter the size of land	Size of land
6. Enter the price of land.	Land price
7. Enter the Name of the owner of land.	Land Owner Name
8. Enter the Location of the land.	Land location(zilla, thana, upazila)
8. After clicking the "Done" button, creating advertisements is processed.	
9. Produce an online land advertisement and will be visible to users.	
Preconditions: User has to be registered in this system with his/her NID or birth certificate ID and fill up all necessary information.	
Postconditions: Land selling advertisement has been added to the database and will be visible to all users of the system.	
Error Condition: If the Record of Right copy ID or mutation ID or Non-Encumbrance Certificate ID is not valid, then the user will be notified.	
Assumptions: User has successfully logged on with access to Create Land Selling Advertisement Online screen.	
Success Guarantee: Land selling advertisement has been added to the database and was visible to all users of the system.	
Minimum Guarantee: Land selling advertisement has been added to the database and will be visible to all users later.	
Objectives Met: Create advertisements for Land selling.	
Outstanding Issue: What course of action should be taken when required information is missing.	
Priority (optional): High	
Risk (optional): Medium	

Alternative Scenario for Use Cases:

Alternative Use Case 1:

Use Case Name: Land Registration	
Area: Sub Register Office	
Actor(s): Citizen	
Stakeholders: Citizen, Customer	
Level: Blue	
Description: Online Land Registration for land and generate an online copy of land registration.	
Triggering Event: Land Registration button is clicked	
Trigger Type: External	
Steps Performed(Main Path)	Information for Steps
1. Login to the system.	Username & password, designation.
2. Click on the Land Registration Online Button.	
3. Enter the Record of Right copy ID.	Record of Right ID
4. Enter the mutation of property ID.	Mutation ID
5. Enter the Non-Encumbrance Certificate ID.	Non-Encumbrance Certificate ID
6. Enter the amount of tax of the land.	Tax amount
7. Enter the Name of the owner of land. If the main owner of land is dead, then the user needs to add the names of warisan and mention the relation with the owner.	Land Owner Name, warisan's names and relation
8. The user need to upload the warisan & succession certificate to the system	
8. After clicking the "Done" button,	

registration is processed.	
9. Produce a registration notification and will have to for the Sub register officer's check and confirmation.	
Preconditions: User has to be registered in this system with his/her NID or birth certificate ID and fill up all necessary information.	
Postconditions: Registration information has been added to the database and online registration copies have been generated.	
Assumptions: User has successfully logged on with access to Land Registration Online system.	
Success Guarantee: Registration information has been added to the database and required reports printed.	
Minimum Guarantee: Registration information has been added to the database and required reports will be printed later.	
Objectives Met: Online land registration.	
Outstanding Issue: What course of action should be taken when required information is missing.	
Priority (optional): High	
Risk (optional): Medium	

Alternative Use Case 2:

Use Case Name: Create advertisement for Land selling.
Area: Sub Register Office
Actor(s): Citizen
Stakeholders: Citizen, Customer
Level: Blue
Description: Create advertisements for Land selling online.
Triggering Event: Create advertisements button is clicked.
Trigger Type: External

Steps Performed(Main Path)	Information for Steps
1. Login to the system.	Username & password, designation.
2. Click on the select zilla button and all zilla lists will be displayed. Users will choose one.	Zilla name
3. Click on the select upazila and all upazila lists will be displayed. Users will choose one.	Upazila name
4. Click on the select thana and the all thana list will be displayed. Users will choose one.	Thana Name
5. All land IDs will be displayed and the user will search for his land ID and select from there.	land id
6. Click on select land for sale.	
7. Enter the size of land.	Land size
8. Enter the price of land.	Land price
9. Now, if the user is not by born Bangladeshi and he doesn't have any NID or Bangladeshi birth certificate, then the user needs to enter his/her passport Number or house's electric/gas bill copy.	Passport number, electric/gas bill copy.
10. After clicking the "Done" button, creating advertisements is processed.	
11. Information received notification will be displayed and will be checked by the sub register officer. If every information is valid then, advertisement will be created	
Preconditions: User has to be registered in this system with his/her NID/birth certificate ID/ and fill up all necessary information.	
Postconditions: Land selling advertisement has been added to the database and will be visible to all users of the system.	
Error conditions: If any given information is wrong or invalid, the user will be notified.	
Assumptions: User has successfully logged on with access to Create Land Selling	

Advertisement Online screen.
Success Guarantee: Land selling advertisement has been added to the database and was visible to all users of the system.
Minimum Guarantee: Land selling advertisement has been added to the database and will be visible to all users later.
Objectives Met: Create advertisements for Land selling.
Outstanding Issue: What course of action should be taken when required information is missing.
Priority (optional): High
Risk (optional): Medium

Functional Requirements:

A functional requirement is a feature, function, or characteristic that a system must have in order to satisfy the user's needs and meet business requirements. Citizens, clients, sub register officers, and land deed checkers are the users of this system. The following functional needs must be met in order to appease them and successfully manage the business for sub registration office as a stakeholder:

1. The system must enable the exchange of the owner name, non-encumbrance certificate ID, and copy of the citizen's Record of Right ID between the citizen and the customer.
2. The system must include all required features so that users can interact with consumers and sub register officers.
3. The system must have online payment capabilities (for paying taxes and for purchasing land).
4. Citizens must be able to request the sub register officer for an online hearing through the system.
5. The system must enable users to create online ads for land sales.
6. The system should enable the sub register officer to keep track of all the work consumers and citizens do.
7. The system must enable sub register officers to alert the public in the event of a process fault.

Non-Functional Requirements:

An explanation of the system's features, traits, and qualities as well as any restrictions that might set the limits of the suggested solution constitute a nonfunctional requirement. Below we examine 5 such non-functional criteria for this system.

1. High-end performance is required.
2. The criteria for privacy ought to be stringent.
3. The system should function on all platforms and devices because it will be used by users of all socioeconomic levels.
4. Because all users of this system will have a basic comprehension of the English language and will be accustomed to utilizing current gadgets, the system does not require a lot of training materials and may be established by the Bangla & English Language.
5. Only subregister authority should be able to access the system, and no other entity should be able to meddle with it.