

**Requirements Specification**  
**Group Project 3 – Group 2**  
**08 April 2008**

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# **1 Project Drivers**

## **1.1 The Project Effort**

### **1.1.1 Background**

As part of obtaining our degree at Napier University, all 3<sup>rd</sup> year students require to take part in a group project. The students are split into groups of five and are given the freedom to choose a project.

### **1.1.2 Motivation**

Our group has chosen to create a website for a fictional firm, Napier Estate Agency. The main motivation behind doing this particular project is to look into the groovy/grails technology.

The project has given us a good opportunity to work in a team environment. The experience we will gain through working on the project will provide us with a good foundation for when it comes to leaving university and moving on to work in a business environment.

A main motivation behind the project is to look at how we can use collaborative software to work as efficiently as possible in a team. As all members of the team will be doing some coding, we feel that using such software is going to be necessary in order to keep everything organised.

### **1.1.3 Goals**

The primary goal of the project is to have a complete website in place by week 12 which achieves all of the requirements set out in this document. As the project is part of a university module however, we are aware that we need to produce and hand in several other items before week 12, namely the project documentation.

## **1.2 Customer**

The customer is required to test and validate our software, as well as participating in the acceptance testing. As our customer, Napier Estate Agency, does not exist, we needed to find someone to act as the customer. Our supervisor would be suitable for this task in our view, as he will be following the progress of the project from the beginning and will have a similar perspective to that which a real customer might have.

## **1.3 Users**

The system will have several different types of users. Primarily they will be people who wish to buy or sell a property. The customer, Napier Estate Agency, will also be considered a user of the system. As mentioned above, due to our customer being theoretical, our supervisor will take on this role. He will also stand in as buyers and sellers in order to fully test the system.

## **2 Functional and Data Requirements**

### **2.1 Modes**

The site will have two main modes. One for registered users and one for guests to the site.

#### **2.1.1 Guest Mode**

This is the mode which users will enter upon opening the website. The site will have several basic functions which anyone who is visiting can use. These are browsing and searching the properties, creating an account and logging in.

#### **2.1.2 Logged In Mode**

The site will allow users who have registered to login in order to perform extra functions. These extra functions will be specific to the user's class, whether they are a seller, buyer or an estate agent. I.e. if you have a seller account, when you log in the site will detect this and provide you with the extra functions available to sellers.

### **2.2 Data Requirements**

As the site has a login system, the details of each user will need to be stored in a secure database. Details of the properties, interest lists and appointments will also need to be stored using a database.

### **2.3 List of Requirements**

This section will detail each specific function the system will perform. Each function is related to a use case and can be performed by specific user classes only. This information is shown in the tables.

For the purposes of this list, four user classes will be referred to: seller, buyer, estate agent and guest. Seller/buyer and estate agent refer to users who are logged in. The guest class refers to users who have not logged in, in other words users who are viewing the site in 'guest mode'. It is important to note that guests will only be able to sign up for a buyer or seller account, not an estate agent account. There will be a pre-defined estate agent account for use by the estate agency.

<b>Requirement No : 1</b>	<b>Name : <u>Login to the system</u></b>	
<b>User Class : Guest</b>	<b>Type : Functional</b>	<b>Use Case : 4.1 Authenticate</b>
<b>Rationale :</b> In order for the user to gain access to extra class specific functions.		
<b>Description :</b> The system will allow the user to log on by entering a username and a password. The system will authenticate the details and then, providing they are correct, it will log the user in giving them access to their class specific functions.		

<b>Requirement No : 2</b>	<b>Name : <u>Browse the properties</u></b>	
<b>User Class : All</b>	<b>Type : Functional</b>	<b>Use Case : 4.2 Browse/Search Properties</b>
<b>Rationale :</b> In order for the user to view the available properties.		
<b>Description :</b> The system will allow any class of user to view a list of the properties available on the site and if they so wish, to sort them.		

<b>Requirement No : 3</b>	<b>Name : <u>Search the properties</u></b>	
<b>User Class : All</b>	<b>Type : Functional</b>	<b>Use Case : 4.2 Browse/Search Properties</b>
<b>Rationale :</b> In order for the user to find properties by certain search criteria.		
<b>Description :</b> The system will allow any class of user to search the list of properties by its attributes.		

<b>Requirement No : 4</b>	<b>Name : <u>Register for a buyer or seller account</u></b>	
<b>User Class : Guest</b>	<b>Type : Functional</b>	<b>Use Case : 4.3 Create an account</b>
<b>Rationale :</b> In order for guests to the site to register so that they can gain access to the class specific functions.		
<b>Description :</b> The system will allow guests to sign up for a buyer or seller account. They will have to enter personal information about themselves, and choose a username and password. The system will verify each field and provide informative error feedback if a detail is incorrect.		

<b>Requirement No : 5</b>	<b>Name : <u>Maintain profile</u></b>	
<b>User Class : Buyer/Seller</b>	<b>Type : Functional</b>	<b>Use Case : 4.5 Maintain personal details</b>
<b>Rationale :</b> In order for buyers or sellers to keep their personal details up to date and correct.		
<b>Description :</b> The system will allow buyers or sellers to view their profile and edit the details of it such as name, address, postcode or telephone number. The system will verify that each modified entry is acceptable.		

<b>Requirement No : 6</b>	<b>Name : <u>Add a property for sale</u></b>	
<b>User Class : Seller</b>	<b>Type : Functional</b>	<b>Use Case : 4.10 Register property details</b>
<b>Rationale :</b> In order for sellers to list their property(ies) on the site.		
<b>Description :</b> The system will allow sellers to add a property to the site that they want to sell. The seller will enter the details of their property and upload a photo if they wish. The system will validate this information, it will then be passed to an estate agent for verification and to decide if it should be added to the system.		

<b>Requirement No : 7</b>	<b>Name : <u>Verify a property</u></b>	
<b>User Class : Estate Agent</b>	<b>Type : Functional</b>	<b>Use Case : 4.6 Manage added properties</b>
<b>Rationale :</b> In order for the estate agent to be in control of what properties are available on the site they must review each added property before it is put online.		
<b>Description :</b> The system will allow estate agents to verify properties that have been added by sellers before they are made available on the site. They will be shown the details of the property and can then decide whether it should be added or not.		

<b>Requirement No : 8</b>	<b>Name : <u>Edit / Remove a property</u></b>	
<b>User Class : Seller/Estate Agent</b>	<b>Type : Functional</b>	<b>Use Case : 4.4 Edit / Remove property</b>
<b>Rationale :</b> In order for either the seller of a property or the estate agent to edit the details of a property or to completely remove it.		
<b>Description :</b> The system will allow each property to be edited or removed by its seller or by the estate agent.		

<b>Requirement No : 9</b>	<b>Name : <u>Register interest in a property</u></b>	
<b>User Class : Buyer</b>	<b>Type : Functional</b>	<b>Use Case : 4.4 Register interest in a property</b>
<b>Rationale :</b> In order for a buyer to get up to date information on properties they are interested in.		
<b>Description :</b> The system will allow buyers to keep a list of properties they are interested in, allowing them to receive up to date information on these properties via an email.		

<b>Requirement No : 10</b>	<b>Name : <u>Remove interest in a property</u></b>	
<b>User Class : Buyer</b>	<b>Type : Functional</b>	<b>Use Case : 4.11 Remove property from list</b>
<b>Rationale :</b> In order for a buyer to remove properties they are no longer interested in from their interested list.		
<b>Description :</b> The system will allow buyers to view their interested list of properties and remove any they no longer have an interest in.		

<b>Requirement No : 11</b>	<b>Name : <u>Make an appointment</u></b>	
<b>User Class : Buyer</b>	<b>Type : Functional</b>	<b>Use Case : 4.8 Manage the appointments</b>
<b>Rationale :</b> In order for the buyer to make an appointment to view in person any property.		
<b>Description :</b> The system will allow buyers to see the available viewing times for a specific property and then make an appointment to see it in any of the available viewing slots.		

<b>Requirement No : 12</b>	<b>Name : <u>Manage appointments</u></b>	
<b>User Class : Estate Agent</b>	<b>Type : Functional</b>	<b>Use Case : 4.8 Manage the appointments</b>
<b>Rationale :</b> In order for the estate agent to manage appointments with buyers so as to avoid any schedule clashing.		
<b>Description :</b> The system will allow the estate agent to accept or decline a proposed appointment by a buyer.		

### 3 Look and Feel Requirements

#### 3.1 The Interface

There are several requirements which the interface must meet. It is important that the site is not overwhelming and as such the interface should be kept as simple as possible. It is required that the site is consistent throughout, both in terms of the colour scheme and the layout. It is required that the site can display lists of properties with thumbnail photos and that it shows these lists centrally and in a neat and structured way.

### 4 Usability Requirements

As the project is a website, the usability of it will be critical. If the website is difficult to use, people will leave. It is therefore important that we test the usability of the site carefully and thoroughly. As people have different skills and experience, we will need to have more than one person to test the usability of the site.

#### 4.1 Usability Factors

##### 4.1.1 Understandability

It is important that both experienced and new users understand how to use the system. The site should be self explanatory and thus any user, including users who are completely new to the system, should be able to carry out any task.

We will measure the understandability by asking the user to carry out set tasks and then having them keep a note of how many times they had to refer to the manual.

According to our requirement, the users should be able to carry out any task without referring to the manual or online help section.

#### **4.1.2 Effectiveness**

This requirement ties into the above one. Users should be able to complete any task they set out to complete.

We will measure the effectiveness of the system by asking the user to carry out set tasks and then counting the number of tasks they were unable to complete. According to our requirement, the users should not be unable to complete any tasks.

#### **4.1.3 Efficiency**

The system should be efficient for any user. The user should be able to navigate through the site and carry out any task (in line with the correct user access).

We will measure the efficiency with which this is done by timing how long it takes the user to carry out set tasks. Example tasks include adding a property or making an appointment. According to our requirement, the user should be able to carry out any task within a reasonable time.

#### **4.1.4 Satisfaction**

The user should be satisfied by the experience of using the website. This would make them more likely to return and use the system again.

We will measure the satisfaction levels of the users by having them rate the site out of ten. According to our requirement, the site should receive an average rating of at least seven out of ten.

## **5 User Documentation**

In order for new users to familiarise themselves with our system, several pieces of user documentation will be written. As well as a paper based manual, the site will include a help section. The manual is expected to be more detailed, we do however anticipate that the help section will be sufficient enough to assist in solving most problems the users might face. It should be noted that as the project is a website, one of the main aims is to make the site self-explanatory so that users can complete any task without having to refer to the manual or online help section.