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**CompSys**

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# **Introduction**

# **Functional Components**

## **Hierarchy chart**

# **User Requirements**

## **The system performs staff administration**

### CompSys will allow the details of each new staff to be recorded.

### CompSys will allow a staff details to be amended.

### CompSys will generate a staff listing.

## **The system performs member administration**

### CompSys will allow the details of each new member to be recorded.

### CompSys will allow a member details to be amended.

### CompSys will allow querying a member.

### CompSys will generate a member listing.

## **The system performs repair management**

### CompSys will allow the details of each new repair to be recorded.

### CompSys will generate a new repair estimate.

### CompSys will allow the system to validate a new repair.

### CompSys will issue invoices for each new repair.

### CompSys will process ever repair being collected.

### CompSys will generate repair report for each repair.

## **The system performs administration**

### CompSys will generate a list of jobs and their status.

### CompSys will issue invoice for any repair at any given period.

### CompSys will generate income analysis to require specification.

# **System Requirements**

## **System Level Use Case Diagram**

**Computer Repair System**

Manager

Staff

## **Manage Staff**

This module is responsible for adding new staff, amending existing staff and listing them in ascending order of surname, forename. The staff can be set to **inactive** from the ‘amend staff’ sub-module.

### New Staff

#### UC Diagram to allow the details of each new staff to be recorded.

Staff

Manager

<<includes>>

<<extends>>

<<includes>>

<<includes>>

<<extends>>

#### UC Narrative to allow the details of each new staff to be recorded.

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name** | **New Staff** | | **Author: Nazmul Alam** |
| **Use Case Id** | 3.1.1 | | **Date: 14/10/2014** |
| **Priority** | High | | |
| **Source** | Staff | | |
| **Primary Business Actor** | Manager | | |
| **Other Participating Actors** | Staff | | |
| **Description** | * Shop manager registers new staff in the system before they can start working in the computer repair shop. | | |
| **Preconditions** |  | | |
| **Trigger** | * Manager needs to register a new staff member | | |
| **Typical Scenario** | **Actor Action** | **System Response** | |
|  | **Step 1: The manager chooses add new staff.**  **Step 3: The manager enters the required information:**   * **Surname** * **Forename** * **DOB** * **Address 1** * **Address 2** * **Town** * **County** * **Phone** * **Email**   **Step 4: The manager confirms that the staff is to be registered** | **Step 2: The system displays create staff form.**  **Step 5:The system validates the data entered:**   * **All fields are required** * **All data type are valid**   **Step 6: The system assigns the Staff ID**  **Step 7: The system assigns Registration Date as the current system date**  **Step 8: The system assigns the staff status a default value of ‘active’**  **Step 9: The system saves the new staff details in the Staff file.**  **Step 10: The system displays a confirmation message** | |
| **Alternate Scenarios** | **Actor Action** | **System Response** | |
| **A required field not entered** | **Step 7: Manager re-enters the required field.** | **Step 5: A required field is not entered**  **Step 6: The system displays an appropriate error message and notifies the error sources** | |
| **The process continues to normal flow from Step 9** | | |
| **Conclusions** | * New staff is created. | | |
| **Post conditions** | * New staff created on the system cannot be deleted. | | |
| **Business Rules** | * Staff cannot do any repair shop work without registering on the system. | | |
| **Implementation Constraints** |  | | |

### Amend Staff

#### UC Diagram to allow staff details to be amended.

Manager

Staff

<<extends>>

<<includes>>

<<includes>>

<<extends>>

#### UC Narrative to allow staff details to be amended.

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name** | **Amend Staff** | | **Author: Nazmul Alam** |
| **Use Case Id** | 3.1.2 | | **Date: 22/10/2014** |
| **Priority** | Medium | | |
| **Source** | Staff | | |
| **Primary Business Actor** | Manager | | |
| **Other Participating Actors** | Staff | | |
| **Description** | * The **manager** must enter **updated** staff details and save them to the staff file. | | |
| **Preconditions** | * New staff should supply updated details. | | |
| **Trigger** | * Staff requests staff details to be amended. | | |
| **Typical Scenario** | **Actor Action** | **System Response** | |
|  | **Step 1: Staff makes an application to amend details of the staff file and submits new staff details.**  **Step 2: Manager requires these details to query for the staff:**   * **Surname** * **Forename** * **DOB** * **Town**   **Step 4: The manager starts to enter new staff details to the system.**   * **Address 1** * **Address 2** * **Town** * **County** * **Phone** * **Email** * **Status** | **Step 3: The system retrieves all the staff details from the staff file.**  **Step 5:The system validates the data entered:**   * **All fields are required** * **All data type are valid**   **Step 7: The system adds Amend Date as the current system date**  **Step 8: The system amends the new staff details in the Staff file. A Message is displayed to the screen to inform the manager that the staff details have been updated.** | |
| **Alternate Scenarios** | **Actor Action** | **System Response** | |
|  |  |  | |
|  |  | | |
| **Conclusions** | * The staff details are amended and saved to the staff file | | |
| **Post conditions** | * The staff requires for details to be amended | | |
| **Business Rules** |  | | |
| **Implementation Constraints** |  | | |

### List Staff

#### UC Diagram to generate a staff listing.

Staff

Manager

#### UC Narrative to generate a staff listing.

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name** | **List Staff** | | **Author: Nazmul** |
| **Use Case Id** | 2.1.1.4 | | **Date: 14/10/2014** |
| **Priority** | Low | | |
| **Source** |  | | |
| **Primary Business Actor** | Staff | | |
| **Other Participating Actors** | Manager | | |
| **Description** |  | | |
| **Preconditions** | New staff should be registered before | | |
| **Trigger** | New staff system | | |
| **Typical Scenario** | **Actor Action** | **System Response** | |
|  | **Step 1:**  **Step 4:** | **Step 2:**  **Step 3:**  etc | |
| **Alternate Scenarios** | **Actor Action** | **System Response** | |
|  |  |  | |
|  |  | | |
| **Conclusions** | New staff is created. | | |
| **Post conditions** |  | | |
| **Business Rules** |  | | |
| **Implementation Constraints** |  | | |

## **Manage Customers**

This module is responsible for adding new customer, querying and amending existing customer accounts and listing them in ascending order of surname, forename. The customer can be set to **inactive** from the ‘amend customer’ sub-module.

### New Customer

### Amend Customer

### List Customers

### Query Customer

## **Manage Repair**

### New Repair

### New Estimate

### Validate Repair

### Collect Repair

### Repair Reports

## **Manage Admin**

### List Jobs

### Issue Invoice

### Income Analysis

### Set Repair Rate

# **Data Model**

# **Database Schema**

# **Program Specifications**

# **Conclusion**

# **References:**

<http://www.academia.edu/3046773/Requirement_Analysis_Document_for_Recruitment_Management_System>