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| Patient | |
| Name  Birth Date  Health Card Number  Patient’s Visits to the hospital  Patient’s arrival time to the hospital  Patient’s medical record  Get Name  Get Age  Get Patient’s Visits to the hospital  Get Health Card Number  Get Medical Record  Get Birth Date.  Get Patient’s arrival time to the hospital  Set Patient’s arrival time to the hospital | Nurse  Doctor  Health Professional  Visit  Medical Record  Hospital Database  Display Activity  Register Patient Activity  Update Patient Vital  Activity  Patient Status Activity  Doctor Activity  Patient History Activity  Patient List Activity |

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| Hospital Database | |
| Master Patients Pool  Patients Grouped By Urgency  Load Existing Patients’ Data From File  Save Patients’ Data to File  Find Patient in Master Patient Pool by Health Card Number  Add Patient to Master Patients Pool  Add Patient to Patients Grouped By Urgency  Get Master Patients Pool  Get Patients Grouped By Urgency  Get Patients Ordered By Urgency  Add symptoms to a Patient in Database  Add Temperature to a Patient in Database  Add Blood Pressures to a Patient in Database  Add Heart Rates to a Patient in Database  Add Prescription Names to a Patient in Database  Add Prescription Instructions to a Patient in Database  Get Medical History of a Patient in Database by Health  Card Number | Health Professional  Patient  Medical Record |

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| Health Professional  Doctor | |
| Record Prescription | Patient  Medical Record  Hospital Database |

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| Health Professional  Nurse, Doctor | |
| Hospital Database  Load Existing Patients’ Data From File  Look Up Patient  Save Data to File | Patient  Medical Record  Hospital Database |

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| Health Professional  Nurse | |
| Record Patient Data  Update Patient’s Vitals  Update Patient’s Symptoms  Update Patient’s Seen By Doctor Status  Lookup Patient Record From Database | Patient  Hospital Database  Medical Record  Visit |

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| Log in | |
| Check Validity of Log in information | Main Activity |

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| Medical Record | |
| Symptoms  Temperature  Blood Pressure  Heart Rate  Prescription Names  Prescription Instructions  Update Symptoms  Update Temperature  Update Blood Pressure  Update Heart Rate  Update Prescription Name  Update Prescription instruction  Get Most Recent Symptoms  Get Most Recent Temperature  Get Most Recent Blood Pressure  Get Most Recent Heart Rate  Get Most Recent Prescription Name  Get Most Recent Prescription Instruction  Get Symptoms History  Get Temperature History  Get Blood Pressures History  Get Heart Rates History  Get Prescription Names History  Get Prescription Instructions History | Health Professional  Nurse  Patient  Visit |

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| Visit | |
| Current Visit’ s Patient Seen By Doctor Status  Current Visit’ s Patient’s Urgency level  Current Visit’s time at which Patient was seen by Doctor  Set Seen By Doctor Status for Current Visit  Set Time Seen By Doctor for Current Visit  Calculate Patient’s Urgency level for Current Visit  Set Patient’s Urgency level for Current Visit  Get Seen By Doctor Status for Current Visit  Get Time Seen By Doctor for Current Visit  Get Patient’s Urgency level for Current Visit | Health Professional  Nurse  Doctor  Patient  Medical Record |

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| Activity  Main Activity | |
| File Name containing users’ usernames and passwords  Get User’s User Name  Get User’s Password  Log in Valid User  Allow transition to Display Activity  Pass user’s type to next activity (Nurse/Doctor) | Display Activity  Login |

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| Activity  Display Activity | |
| Patients’ Data File Name  Hospital Database (Patients’ information)  Load Existing Patients’ Data and add them to Database  Allow Nurses to transition to Register Patient Activity  Get Patient’s Health Card Number from user  Check user’s input  Find Patient by Health card Number  Allow Nurses to transition to Patient List Activity  Log Out user  Pass user’s type to next activity (Nurse/Doctor) | Main Activity  Patient Status Activity  Patient List Activity  Register Patient Activity  Hospital Database  Patient |

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| Activity  Register Patient Activity | |
| Patients’ Data File Name  Hospital Database (Patients’ information)  Load Existing Patients’ Data and add them to Database  Get Patient’s name from user  Get Patient’s Health Card Number from user  Get Patient’s Date Of Birth From User  Check user’s input  Create New Patient  Add New Patient to Database  Save New Patient’s Data to File  Allow transition to Update Patient Vital Activity  Pass Patient’s Health Card Number to next activity | Display Activity  Update Patient Vital Activity  Patient  Nurse  Hospital Database |

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| Activity  Update Patient Vital Activity | |
| Patients’ Data File Name  Hospital Database (Patients’ information)  Load Existing Patients’ Data and add them to Database  Get Patient’s Health card Number from previous activity  Get Patient’s current Temperature from user  Get Patient’s current Blood Pressure from user  Get Patient’s current Heart Rate from user  Get Patient’s current Diastolic Pressure from user  Get Patient’s current Systolic Pressure from user  Get Patient’s current Symptoms from user  Update Patient’s Vitals  Update Patient’s Symptoms  Save Patients’ data to file  Allow transition to Patient Status Activity  Pass Patient’s Health Card Number to next activity  Pass user’s Type (Nurse) | Register Patient Activity  Patient Status Activity  Patient  Nurse  Hospital Database |

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| Activity  Patient Status Activity | |
| Patients’ Data File Name  Hospital Database (Patients’ information)  Load Existing Patients’ Data and add them to Database  Get Patient’s Health card Number from previous activity  Find the Patient with given Health Card Number  Display the Patient’s Most recent Medical Record  Allow transition of doctors to Doctor Activity  Allow transition to Patient History Activity  Allow transition to Display Activity  Allow Nurses to transition to Update Patient Vital Activity  Allow Nurses to update Patient’s seen by doctor status on user’s input  Pass Patient’s Health Card Number to next activity  Pass user’s Type (Nurse/Doctor) | Update Patient Vital Activity  Doctor Activity  Patient History Activity  Display Activity  Patient  Nurse  Hospital Database |

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| Activity  Doctor Activity | |
| Patients’ Data File Name  Hospital Database (Patients’ information)  Load Existing Patients’ Data and add them to Database  Get Patient’s Health card Number from previous activity  Find the Patient with given Health Card Number  Get Patient’s current Prescription Name from user  Get Patient’s current Prescription instruction from user  Update the Patient’s Prescription Name and instruction  Save Data to file  Allow transition to Patient Status Activity  Pass Patient’s Health Card Number to next activity  Pass user’s Type (Doctor) | Patient Status Activity  Health Professional  Doctor  Patient  Hospital Database |

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| Activity  Patient History Activity | |
| Patients’ Data File Name  Hospital Database (Patients’ information)  Load Existing Patients’ Data and add them to Database  Get Patient’s Health card Number from previous activity  Find the Patient with given Health Card Number in  Hospital Database  Display the Patient’s Medical History  Allow transition to Display Activity  Pass Patient’s Health Card Number to next activity  Pass user’s Type (Nurse/Doctor) | Patient Status Activity  Hospital Database  Patient |

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| Activity  Patient List Activity | |
| Patients’ Data File Name  Hospital Database (Patients’ information)  Load Existing Patients’ Data and add them to Database  Gets Patients ordered by urgency from Hospital Database  Displays the Name, Birth date, Health Card Number of  Patients in urgency List  Allow transition to Display Activity  Pass user’s Type (Nurse) | Display Activity  Hospital Database  Patient |