***Fully Dressed Narration of Use cases***

***UC1:******Login to System***

***Primary actors:*** *System Administrator, Receptionist/Management Staff,*

*Doctor, Patient, Nurse.*

***Trigger:***  *user hits login Button in HMS home page.*

***Preconditions:*** *The user is not yet logged in*

***Post conditions:*** *The user can access the main menu of their Profile*

***Main Success scenario:***

1. *User types in his/her User Name*
2. *User types in his/her Password*
3. *System Validates given login parameters*
4. *System creates a new session for the user*

***Alternative flows:***

1. *User provides invalid login parameters:*
2. *System show warning about wrong parameters.*
3. *System redirects the user to the login page again.*
4. *User reenters his/her id and password*

***Special requirements:*** *Response time less than 3 seconds*

***Technology and Data Variations List:***

*User wants to be remembered on a particular Pc.*

***Frequency of occurrence:*** *Once every time use gets log out.*

***UC2:******Logout from System***

***Primary actors:*** *System Administrator, Receptionist/Management Stuff, Doctor , Patient, Nurse.*

***Trigger:*** *User hits logout Button in HMS home page.*

***Preconditions:***  *The user is logged in*

***Postconditions:*** *The user successfully gets logged out from his/her account*

***Main Success scenario:***

1. *User finishes his/her session by hitting logout option and get log out from HMS*

***Alternative flows:***

1. *Net gets disconnected:*
2. *System will automatically log out if net gets disconnected.*

***Special requirements:*** *Response time less than 3 seconds*

*Technology and Data Variations List:*

*None?*

***Frequency of occurrence:*** *Once every time use gets logged it.*

***UC3:******Add/Register Patient***

***Primary actors:*** *System Administrator, Receptionist/Management Stuff*

***Trigger:*** *Admin/ Receptionist hits register Patient Button in HMS home page.*

***Preconditions:***  *Patient is not Already Registered*

***Postconditions:*** *Patient gets Register*

***Main Success scenario:***

1. *New Patient comes to the hospital.*
2. *Admin/Receptionist starts a new Patient registration*
3. *Admin/Receptionist enters basic Patient information (Name, Age, Gender, Cnic of his/her or guardian, Phone Number, Illness)*
4. *System Assigns New Id and Password to Patient.*
5. *Admin/Receptionist saves Registration Form*
6. *System Displays Profile of new Patients.*

***Alternative flows:***

1. *at any time system fails:*
2. *Admin/ Receptionist restarts system, logs in and request recovery of prior state.*
3. *System reconstructs prior state*
4. *Admin/ Receptionist starts a new Patient registration*

*b) Any Required Field Left Blank in Registration Form*

1. *System signals error to Admin/Patient*
2. *Admin/ Receptionist enters missing field to get Patient Register.*

***Special requirements:*** *Response time less than 3 seconds*

***Technology and Data Variations List:***

*Patient Id and Password could be generated by the system or entered by Admin/ Receptionist*

***Frequency of occurrence:*** *Patient only gets registered once.*

***UC4:******Add/Register Doctor***

***Primary actors:*** *System Administrator*

***Trigger:*** *Admin hits register Doctor Button in HMS home page.*

***Preconditions:***  *Doctor is not Already Registered*

***Postconditions:*** *Doctor gets Register*

***Main Success scenario:***

1. *Admin starts a new Doctor registration.*
2. *Admin enters basic Doctor information (Name, Age, Gender, Cnic of his/her, Phone Number, Illness)*
3. *Admin enters Qualifications (Degree, Specialty, Experience)*
4. *System Assigns New Id and Password to Doctor.*
5. *Admin saves Registration Form*
6. *System Displays Profile of new Doctor.*

***Alternative flows:***

1. *at any time system fails:*
2. *Admin restarts system, logs in and request recovery of prior state.*
3. *System reconstructs prior state*
4. *Admin starts a new Patient registration*
5. *Any Required Field Left Blank in Registration Form*
6. *System signals error to Admin*
7. *Admin enters missing field to get Doctor Register.*

***Special requirements:*** *Response time less than 3 seconds*

***Technology and Data Variations List:***

*Doctor Id and Password could be generated by the system or entered by Admin/ Receptionist*

***Frequency of occurrence:*** *Doctor only gets registered once.*

***UC5:******Add/Register Staff person, Nurse***

***Primary actors****: System Administrator*

***Trigger:*** *Admin hits register Staff/Nurse Button in HMS home page.*

***Preconditions:*** *Staff/Nurse is not Already Registered*

***Postconditions:*** *Staff/Nurse gets Register*

***Main Success scenario:***

1. *Admin starts a new Staff/Nurse registration.*
2. *Admin enters basic Staff/Nurse information (Name, Age, Gender, Cnic of his/her, Phone Number, Illness)*
3. *Admin enters Staff/Nurse (Degree, Specialty, Experience)*
4. *System Assigns New Id and Password to Staff/Nurse.*
5. *Admin saves Registration Form*
6. *System Displays Profile of new Staff/Nurse.*

***Alternative flows:***

1. *at any time system fails:*
2. *Admin restarts system, logs in and request recovery of prior state.*
3. *System reconstructs prior state*
4. *Admin starts a new Patient registration*
5. *Any Required Field Left Blank in Registration Form*
6. *System signals error to Admin*
7. *Admin enters missing field to get Staff/Nurse Register.*

***Special requirements:*** *Response time less than 3 seconds*

***Technology and Data Variations List:***

*Staff/Nurse Id and Password could be generated by the system or entered by Admin/ Receptionist*

***Frequency of occurrence:*** *Staff/Nurse only gets registered once.*

***UC6:******Remove Doctor, Staff Member, Nurse***

***Primary actors:*** *System Administrator*

***Trigger:*** *Admin hits Remove Doctor/Staff/Nurse Button in HMS home page.*

***Preconditions:*** *Doctor/Staff/Nurse is Currently Registered*

***Postconditions:*** *Doct Doctor/Staff/Nurse gets Removed.*

***Main Success scenario:***

1. *Admin enters Doctor/Staff/Nurse Id to first search them in Database.*
2. *Admin then hits Remove option by selecting the Doctor/Staff/Nurse tupple.*
3. *System then Confirms current action.*
4. *Admin confirms his/her action.*
5. *System removes Doctor/Staff/Nurse all information and profile.*
6. *System Displays Doctor/Staff/Nurse are successfully removed dialog and redirect to the Home Page.*

***Alternative flows:***

1. *At any time system fails:*
2. *Admin restarts system, logs in and request recovery of prior state.*
3. *System reconstructs prior state*
4. *Admin removes Doctor/Staff/Nurse.*
5. *Admin does not confirms his action and hits cancel*
6. *System signals action not confirmed and redirects to home page.*

***Special requirements:*** *Response time less than 3 seconds*

***Technology and Data Variations List:***

*None?*

***Frequency of occurrence:*** *Doctor/Staff/Nurse only gets removed once.*

***UC7:******Remove Patient***

***Primary actors:*** *System Administrator/Receptionist*

***Trigger:*** *Administrator/Receptionist hits Remove Patient Button in HMS home page.*

***Preconditions:*** *Patient is Currently Registered*

***Postconditions:*** *Patient gets Removed.*

***Main Success scenario:***

1. *Admin/Receptionist enters Patient Id to first search them in Database.*
2. *Admin/Receptionist then hits Remove option by selecting the Patient tupple.*
3. *System then Confirms the removal of current selection.*
4. *Admin/Receptionist confirms his/her action.*
5. *System removes Patient all information and profile.*
6. *System Displays Patient is successfully removed dialog and redirect to the Home Page.*

***Alternative flows:***

1. *At any time system fails:*
2. *Admin/Receptionist restarts system, logs in and request recovery of prior state.*
3. *System reconstructs prior state*
4. *Admin/Receptionist removes Patient.*
5. *Admin/Receptionist does not confirms his action and hits cancel*
6. *System signals action not confirmed and redirects to home page.*

***Special requirements:*** *Response time less than 3 seconds*

***Technology and Data Variations List:***

*None?*

***Frequency of occurrence:*** *Patient only gets removed once.*

***UC8:******Modify Information***

***Primary actors:*** *System Administrator*

***Trigger:*** *Admin hits Modify Information Button in HMS home page.*

***Preconditions:*** *Person must be available in database*

***Postconditions:*** *persons information get modified.*

***Main Success scenario:***

1. *Person currently in System Asks System Admin to Modify his/her details.*
2. *Admin asks his/her id and enters it in the system.*
3. *System shows the information of the person.*
4. *Admin ask for information that needs to be modified.*
5. *Person tells the new Information.*
6. *Admin enters new information in the system and hit save button.*
7. *System then Confirms current action.*
8. *Admin confirms his/her action.*
9. *System save the information in database and show the new information.*

***Alternative flows:***

1. *At any time system fails:*
2. *Admin restarts system, logs in and request recovery of prior state.*
3. *System reconstructs prior state*
4. *Admin modifies the details and save again.*
5. *Admin does not confirms his action and hits cancel*
6. *System signals action not confirmed and redirects to home page.*

***Special requirements:*** *Response time less than 3 seconds*

***Technology and Data Variations List:***

*None?*

***Frequency of occurrence:*** *Person information can be modified multiple times.*

***UC9:******View Profile***

***Primary actors:*** *Doctor, Patients*

***Trigger:*** *Doctor/Patient hits login button to login into his/her profile.*

***Preconditions:*** *Doctor/Patient must be registered in the System.*

***Postconditions:*** *Doctor/Patient get to view his/her profile.*

***Main Success scenario:***

1. *Doctor/Patient in internet browser opens HMS home page and hit login button.*
2. *Doctor/Patient then enter his/her id and password to get log in.*
3. *System After verifying entered id and password redirects home page to therir profile.*
4. *Doctor/Patient then gets to see their stored information in HMS.*

***Alternative flows:***

1. *Net gets disconnected:*
2. *System will automatically log out the logged in account if net gets disconnected.*
3. *System maintenance going on*
4. *System will show error message about System Maintenance*

***Special requirements:*** *Response time less than 3 seconds*

***Technology and Data Variations List:***

*None?*

***Frequency of occurrence:*** *Doctor/Patient can view his/her profile multiple times.*

***UC10:*** ***View Cases***

***Primary actors:*** *Patients*

***Trigger:*** *Patient hits view cases button in his/her profile.*

***Preconditions:*** *Person must have at least one case that he/she has given to Doctor*

***Postconditions:*** *Person gets current information about his/her case.*

***Main Success scenario:***

1. *Patient while logged into his/he account views his/her cases by hitting view case button in his/her account.*

***Alternative flows:***

1. *Net gets disconnected:*
2. *System will automatically log out if net gets disconnected.*

***Special requirements:*** *Response time less than 3 seconds*

***Technology and Data Variations List:***

*None?*

***Frequency of occurrence:*** *Once logged in patient can view his/her case multiple times.*

***UC11:******Get Appointment***

***Primary actors:*** *Patients*

***Trigger:*** *Patient hits get appointment button in HMS Home page.*

***Preconditions:*** *Patient must be logged in the HMS.*

***Postconditions:*** *Patient gets Doctors Appointment.*

***Main Success scenario:***

1. *Patient after logging into his/her account hits get appointment button in HMS Home page.*
2. *Patient then chose his/her illness from the drop down menu in the appointment form.*
3. *System then shows specialized doctors for that category of illness and their availability schedule and available not allocated time slots.*
4. *Patient then requests for the time slot for their appointment from time table.*
5. *System validates patients request and allot them visit time and mark that time slot allocated.*
6. *Patients then get the notification about their allocated time slot with day and doctors name.*
7. *System also dispatches massages to doctor and receptionist about this allocated time slot.*

***Alternative flows:***

1. *No doctor is available:*
2. *Patient will then have to contact receptionist.*

***Special requirements:*** *Response time less than 3 seconds*

***Technology and Data Variations List:***

*None?*

***Frequency of occurrence:*** *user can only get one appointment per day.*

***UC12:*** ***Checking Time***

***Primary actors:*** *Doctor*

***Trigger:***  *Doctor hits set timing button in his profile.*

***Preconditions:*** *Doctor must be logged in the HMS.*

***Postconditions:*** *Doctor sets his availability time successfully.*

***Main Success scenario:***

1. *Doctor after logging in hits set time in his profile.*
2. *Doctor then enters his availability timings and hits save button.*
3. *System saves the time.*

***Alternative flows:***

1. *Doctor does not sets his time:*
2. *System will show error message and ask doctor to set his/her timing.*

***Special requirements:*** *Response time less than 3 seconds*

***Technology and Data Variations List:***

*None?*

***Frequency of occurrence:*** *Doctor can make changes in availability multiple times..*

***UC13:******Enter Appointment cases***

***Primary actors:*** *Receptionist*

***Trigger:*** *Receptionist hits New Appointment button for that day.*

***Preconditions:*** *Receptionist must be logged in the HMS.*

***Postconditions:*** *Receptionist Successfully Enters all the appointment for that day.*

***Main Success scenario:***

1. *Receptionist hits the New Case button in Appointment Page.*
2. *Receptionist then ask Patient for their illness/disease and enters case in case dialog.*
3. *Receptionist then assigns Doctor according to the case of the Patient.*
4. *Receptionist then hits save button and create new appointment for the case.*

***Alternative flows:***

1. *No doctor is available for such disease:*
2. *Receptionist then have to recommend another hospital that have cure for such disease.*

***Special requirements:*** *Response time less than 3 seconds*

***Technology and Data Variations List:***

*None?*

***Frequency of occurrence:*** *Receptionist can make one appointment for one case.*

***UC14:******Check Patient***

***Primary actors:*** *Doctor*

***Trigger:*** *Doctor hits Patient’s Appointment in the time table to start the check up process.*

***Preconditions:*** *Doctor must be logged in the HMS.*

***Postconditions:*** *Doctor Checks up the Patient.*

***Main Success scenario:***

1. *Doctor Checks the Patient according to time allocated to patient for his/her appointment.*
2. *Doctor starts checkup by confirming the appointment in the system.*
3. *Doctor after checking patient marks the appointment checked.*

***Alternative flows:***

1. *Patient does not come:*
2. *Receptionist then sends in the next patient who has the appointment.*

***Special requirements:*** *Response time less than 3 seconds*

***Technology and Data Variations List:***

*None?*

***Frequency of occurrence:*** *user can only get one prescription per visit or none.*

***UC15:******Give Prescription***

***Primary actors:*** *Doctor*

***Trigger:*** *Doctor hits give prescription button HMS Home page.*

***Preconditions:*** *Doctor must be logged in the HMS.*

***Postconditions:*** *Doctor gives prescription to Patient.*

***Main Success scenario:***

1. *Doctor Checks the Patient via allocated appointment.*
2. *Doctor after checking patients gives prescription by hitting Prescription button in Home Page.*
3. *While in prescription form doctor enters Patients id and writes Prescription for his/her illness.*
4. *Doctor then hits save Button.*
5. *System asks for confirmation of action.*
6. *Doctor hits confirm.*
7. *Prescription gets saved in the system.*

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***Alternative flows:***

1. *No prescription required:*
2. *Doctor after checking Patient decides that patient does not require any prescription so there will be no prescription for that visit of patient****.***

***Special requirements:*** *Response time less than 3 seconds*

***Technology and Data Variations List:***

*None?*

***Frequency of occurrence:*** *user can only get one prescription per visit or none.*

***UC16:******Give Response***

***Primary actors:*** *Doctor*

***Trigger:***  *Doctor hits give Response button in HMS Home page.*

***Preconditions:*** *Doctor must be logged in the HMS.*

***Postconditions:*** *Doctor gives response about patient’s case.*

***Main Success scenario:***

1. *Doctor reads patients case from his/her profile.*
2. *Doctor after reading patient’s case gives his/her response about the case.*
3. *Doctor then hits save Button.*
4. *System asks for confirmation of action.*
5. *Doctor hits confirm.*
6. *Response gets saved in the system.*

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***Alternative flows:***

1. *Doctor may not gives response about the case if not required:*
2. *System will not enforce response for particular case.*

***Special requirements:*** *Response time less than 3 seconds*

***Technology and Data Variations List:***

*None?*

***Frequency of occurrence:*** *Any Doctor can give multiple responses about any case.*

***UC17:******Allocate Bed***

***Primary actors:*** *Receptionist*

***Trigger:*** *receptionist hits bed Allocation Button in Hms.*

***Preconditions:*** *Receptionist must be logged in the HMS.*

***Postconditions:*** *Receptionist Assigns Bed to Patient.*

***Main Success scenario:***

1. *Receptionist hits Allocate bed Button in Home Page of HMS.*
2. *System then shows the available bed in a ward.*
3. *Receptionist then assigns bed to the patient.*

***Alternative flows:***

1. *No bed available:*
2. *Receptionist then have to get bed available somehow.*

***Special requirements:*** *Response time less than 3 seconds*

***Technology and Data Variations List:***

*None?*

***Frequency of occurrence:*** *receptionist can assign only one bed to one patient*

***UC18:******Look After Patients***

***Primary actors:*** *Nurses*

***Trigger:*** *Nurse hits patients prescription button.*

***Preconditions:*** *Nurse must be logged in the HMS.*

***Postconditions:*** *Nurse gives prescription to Patient.*

***Main Success scenario:***

1. *Nurse Checks the Patient Prescription given by the doctor by hitting prescription button.*
2. *Nurse then takes prescription and gives to the patient.*
3. *After giving prescription Nurse alters prescription status to done.*

***Alternative flows:***

1. *No prescription found for the patient:*
2. *Do noting.*

***Special requirements:*** *Response time less than 3 seconds*

***Technology and Data Variations List:***

*None?*

***Frequency of occurrence:*** *Nurse can give multiple prescription to multiple patients.*

***UC19:******Input & output Validation***

***Primary actors:*** *System*

***Trigger:*** *When anything is entered in the system.*

***Preconditions:*** *System Must Be Working.*

***Postconditions:*** *System successfully validates every data entered.*

***Main Success scenario:***

1. *System checks the data when entered and and verifies it.*
2. *System generates users id and password*
3. *System successfully saves the data into the database.*

***Alternative flows:***

1. *System Crashes:*
2. *Reboot the system.*

***Special requirements:*** *Response time less than 3 seconds*

***Technology and Data Variations List:***

*None?*

***Frequency of occurrence:*** *System can run multiple times.*