Class Project Phase IV

CSE 360 - Fall 2021

Team Number: 28

Team Members:……

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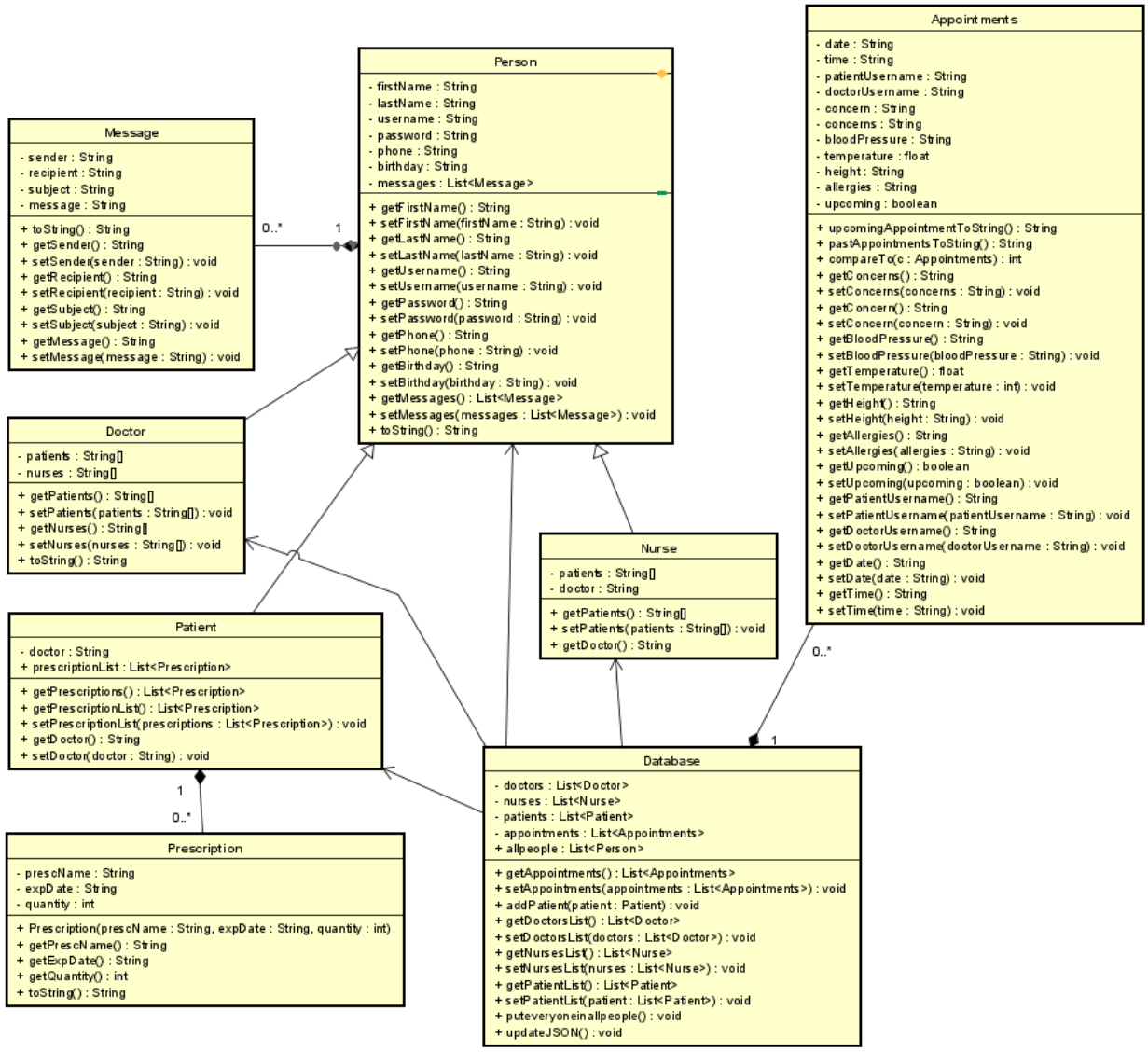
a)

Technical Presentation Video:

https://drive.google.com/drive/folders/1adlJY69WrIN98Fo3tvaKvjPpVcrVtt16

b)

Final Class Diagram



c)

Testing report:

Note: Some tests were removed due to a change in functionality of the program from phase II

Parent/Guardian Use Cases

Use Case: Patient/Guardian Creates Account

Test Case #	Scenario	Expected Output	Passed?
#1	Patient/Guardian enters invalid first name (Includes numerical values, symbols)	Software prompts user to enter correct first name.	No, checks for the input need to be introduced into the program
#2	Patient/Guardian enters Invalid last name (Includes numerical values, symbols)	Software Prompts user to enter correct last name.	No, checks for the input need to be introduced into the program
#3	Patient/Guardian enters invalid password (Includes invalid characters).	Software Prompts user to enter a valid password and displays valid characters.	No, checks for the input need to be introduced into the program
#4	Patient/Guardian Enters Invalid Birthday (Future date, too far in the past, incorrect formatting)	Software prompts user that birthday is invalid with explanation.	No, checks for the input need to be introduced into the program
#5	Patient/Guardian enter some but not all information fields.	Reject attempt to create account and display prompts on missing information fields to fill in the specific field.	Yes
#6	Patient/Guardian enter all information fields with correctly formatted information.	Create user account, auto-generate a username for the user, and display the username to the user.	Yes

Use Case: Patient/Guardian Log In to Portal

Test Case #	Scenario	Expected Output	Passed?
#1	Patient/Guardian enters incorrect username OR password.	Inform user that one of the fields is incorrect, do not specify for security.	Yes
#2	Patient/Guardian enters a username in e-mail format (contains @ symbol).	Inform user that e-mails are not usernames and request given username.	Yes
#3	Patient/Guardian enters information and then selects create account information	Clear text fields and send user to Create Account page.	Yes
#4	Patient/Guardian enters correct log in information and then presses Log In button.	Log into user's account and take them to the home page.	Yes

Use Case: Patient/Guardian Home Page Navigation

Test Case #	Scenario	Expected Output	Passed?
#1	Patient/Guardian presses Log Out button.	Return user to Login Select page.	Yes
#2	Patient/Guardian presses Messages button.	Send user to their Messages inbox.	Yes
#3	Patient/Guardian presses Your Doctor button.	Send user to Doctor information page.	Yes
#4	Patient/Guardian View Profile button.	Send user to their respective profile page.	Yes
#5	Patient/Guardian press View Visit on a specific past visit	Send user to the specific past visits summary page.	Yes
#6	Patient/Guardian view a specific medication	Send user to prescription summary.	Yes

Use Case: Patient/Guardian Your Doctor & Change Doctor page

Test Case #	Scenario	Expected Output	Passed?
#1	User presses Change Doctor Button	Changes a user's doctor	Yes
#2	User does not select a doctor and presses "Change Doctor"	Keeps doctor field the same for the user	Yes

Use Case: Patient/Guardian View Profile & Edit Profile

Test Case #	Scenario	Expected Output	Passed?
#1	User presses edit profile button	Take user to edit profile page	Yes
#2	User enters invalid information when editing information.	Do not allow user to save incorrect information and prompt them to input correct information.	No, user input check needs to be introduced

Use Case: Patient/Guardian Message Page

Test Case #	Scenario	Expected Output	Passed
#1	User presses New Message button	Send user New Message page	Yes, but bug where database only updates after the application has been closed and reopened. Need a refresh functionality
#2	User enters invalid characters for message recipient or message topic.	Inform user of invalid entry.	No, invalid character entry check needs to be introduced to the program
#3	User attempts to send message to recipient who does not exist.	Display on screen that recipient does not exist.	Yes
#4	User presses View Message button	Open the message for the user.	Yes
#5	User presses Delete on inbox screen	Delete the specific message.	Yes
#6	User presses Respond on a message's page.	Send user to new message page with recipient and topic pre-filled.	No, need to add prefill functionality

#7	User presses Delete on a message's page.	Delete message and send user to the inbox page.	Yes

Nurse Use Cases

Use Case: Nurse Log In to Portal

Test Case #	Scenario	Expected Output	Passed?
#1	Nurse enters incorrect username OR password.	Inform user that one of the fields is incorrect, do not specify for security.	Yes
#2	Nurse enters a username in e-mail format (contains @ symbol).	Inform user that e-mails are not usernames and request given username.	No, invalid character entry check needs to be introduced to the program
#3	Nurse enters correct log in information and then presses Log In button.	Log into user's account and take them to the home page.	Yes

Use Case: Nurse Home Page Navigation

Test Case #	Scenario	Expected Output	Passed?
#1	Nurse presses Log Out button.	Return user to Login Select page.	Yes
#2	Nurse presses Messages button.	Send user to their Messages inbox.	Yes
#3	Nurse presses Your Doctor button.	Send user to the doctor they work under information page.	Yes
#4	Nurse press View Profile button.	Send user to their respective nurse profile page.	Yes
#5	Nurse presses New Patient button	Send user to Create Patient Account page.	Yes
#6	Nurse presses view Patient List button	Send user to their respective patient list.	Yes

Use Case: Nurse Searches/Views Patient Database

Test Case #	Scenario	Expected Output	Passed?
#1	Nurse enters invalid characters for patient's first name, last name, and birthday.	Do not search for patient and prompt user of invalid entry.	No, invalid character entry check needs to be introduced to the program
#2	Nurse enters information for a patient that does not exist or is not on the nurse's list	Display on screen that patient is not on list.	Yes
#3	Nurse presses Log Vitals button	Log new appointment for the patient and take nurse to Log Vitals page.	Yes
#4	Nurse presses Remove Patient button	Remove patient from the nurse's list.	No, functionality not implemented yet, need to add delete button to the Nurse's patient table
#5	Nurse presses View Information page	Send Nurse to Patient Information page.	Yes

Use Case: Nurse Navigating Patient Information Page

Test Case #	Scenario	Expected Output	Passed?
#1	Nurse Presses New Appointment	Send Nurse to New Appointment page.	Yes
#2	Nurse presses View Information on a previous patient visit.	Send Nurse to patient visit summary page.	Yes
#3	Nurse presses View Profile button.	Send Nurse to specific patient's profile page (non-editable).	Yes

Use Case: Nurse Logs Patient Vitals

Test Case #	Scenario	Expected Output	Passed
#1	Nurse inputs invalid characters into input fields (Text in numerical fields, vice-versa)	Do not allow nurse to save new visit and specify which input was incorrect.	No, need to implement user input checks
#2	Nurse does not fill in all required fields.	Do not allow nurse to save new visit and specify which fields need to be filled in.	Yes
#3	Nurse fills in all required fields and presses Save New Visit	Save vitals as a new appointment and return nurse to Patient Information page.	yes

Use Case: Nurse Presses New Patient Button (Create New Patient Account)

Test Case #	Scenario	Expected Output	Passed?
#1	Nurse enters invalid first name (Includes numerical values, symbols)	Software prompts user to enter correct first name.	No, need to implement user input checks
#2	Nurse enters Invalid last name (Includes numerical values, symbols)	Software prompts user to enter correct last name.	No, need to implement user input checks
#3	Nurse enters invalid password (Includes invalid characters).	Software prompts user to enter a valid password and displays valid characters.	No, need to implement user input checks
#4	Nurse Enters Invalid Birthday (Future date, too far in the past, incorrect formatting)	Software prompts user that birthday is invalid with explanation.	No, need to implement user input checks
#5	Nurse enters some but not all information fields.	Reject attempt to create account and display prompts on missing information fields to fill in the specific field.	Yes
#6	Nurse enters all information fields with correctly formatted information.	Create patient account, auto-generate a username for the user, and display the username to the user.	Yes

Use Case: Nurse Message Page

Test Case #	Scenario	Expected Output	Passed?
#1	Nurse presses New Message button	Send Nurse New Message page	Yes
#2	Nurse enters invalid characters for message recipient or message topic.	Inform Nurse of invalid entry.	No, need to implement user input checks
#3	Nurse attempts to send message to recipient who does not exist.	Display on screen that recipient does not exist.	Yes
#4	Nurse presses View Message button	Open the message for the Nurse.	Yes
#5	Nurse presses Delete on inbox screen	Delete the specific message.	Yes
#6	Nurse presses Respond on a message's page.	Send Nurse to new message page with recipient and topic pre-filled.	No need to add prefill functionality for a reply
#7	Nurse presses Delete on a message's page.	Delete message and send Nurse to the inbox page.	Yes

Use Case: Nurse View Profile & Edit Profile

Test Case #	Scenario	Expected Output	Passed?
#1	Nurse presses edit profile button	Take Nurse to edit profile page	Yes
#2	Nurse enters invalid information when editing information.	Do not allow Nurse to save incorrect information and prompt them to input correct information.	No, need to implement user input checks

Doctor Use Cases:

Use Case: Doctor Log In to Portal

Test Case #	Scenario	Expected Output	Passed?
#1	Doctor enters incorrect username OR password.	Inform user that one of the fields is incorrect, do not specify for security.	Yes
#2	Doctor enters a username in e-mail format (contains @ symbol).	Inform user that e-mails are not usernames and request given username.	No, need to implement user input checks
#3	Doctor enters correct log in information and then presses Log In button.	Log into user's account and take them to the home page.	Yes

Use Case: Doctor Home Page Navigation

Test Case #	Scenario	Expected Output	Passed?
#1	Doctor presses Back button.	Do nothing. No page to go back to.	Yes
#2	Doctor presses Log Out button.	Return user to Login Select page.	Yes
#3	Doctor presses Messages button.	Send user to their Messages inbox.	Yes
#4	Doctor presses Your Doctor button.	Send user to the doctor they work under information page.	Yes
#5	Doctor press View Profile button.	Send user to their respective Doctor profile page.	Yes
#6	Doctor presses New Patient button	Send user to Create Patient Account page.	Yes
#7	Doctor presses view Patient List button	Send user to their respective patient list.	Yes

Use Case: Doctor Searches/Views Patient Database

Test Case #	Scenario	Expected Output	Passed?
#1	Doctor enters invalid characters for patient's first name, last name, and birthday.	Do not search for patient and prompt user of invalid entry.	No, need to implement user input checks
#2	Doctor enters information for a patient that does not exist or is not on the Doctor's list	Display on screen that patient is not on list.	Yes
#3	Doctor presses Log Vitals button	Log new appointment for the patient and take Doctor to Log Vitals page.	Yes
#4	Doctor presses Remove Patient button	Remove patient from the Doctor's list.	Yes
#5	Doctor presses View Information page	Send Doctor to Patient Information page.	Yes

Use Case: Doctor Navigating Patient Information Page

Test Case #	Scenario	Expected Output	Passed?
#1	Doctor Presses New Appointment	Send Doctor to New Appointment page.	Yes
#2	Doctor presses View Information on a previous patient visit.	Send Doctor to patient visit summary page.	Yes
#3	Doctor presses View Profile button.	Send Doctor to specific patient's profile page (non-editable).	Yes

Use Case: Doctor Logs Patient Vitals

Test Case #	Scenario	Expected Output	Passed?
#1	Doctor inputs invalid characters into input fields (Text in numerical fields, vice-versa)	Do not allow Doctor to save new visit and specify which input was incorrect.	No, need to implement user input checks
#2	Doctor does not fill in all required fields.	Do not allow Doctor to save new visit and specify which fields need to be filled in.	Yes
#3	Doctor fills in all required fields and presses Save New Visit	Save vitals as a new appointment and return Doctor to Patient Information page.	Yes

Use Case: Doctor Presses New Patient (Create New Patient Account)

Test Case #	Scenario	Expected Output	Passed?
#1	Doctor enters invalid first name (Includes numerical values, symbols)	Software prompts user to enter correct first name.	No, need to implement user input checks
#2	Doctor enters Invalid last name (Includes numerical values, symbols)	Software prompts user to enter correct last name.	No, need to implement user input checks
#3	Doctor enters invalid password (Includes invalid characters).	Software prompts user to enter a valid password and displays valid characters.	No, need to implement user input checks

#4	Doctor Enters Invalid Birthday (Future date, too far in the past, incorrect formatting)	Software prompts user that birthday is invalid with explanation.	No, need to implement user input checks
#5	Doctor enters some but not all information fields.	Reject attempt to create account and display prompts on missing information fields to fill in the specific field.	Yes
#6	Doctor enters all information fields with correctly formatted information.	Create patient account, auto-generate a username for the user, and display the username to the user.	Yes

Use Case: Doctor Message Page

Test Case #	**Scenario**	**Expected Output**	**Passed?**
#1	Doctor presses New Message button	Send Doctor New Message page	Yes
#2	Doctor enters invalid characters for message recipient or message topic.	Inform Doctor of invalid entry.	No, need to introduce user input verification
#3	Doctor attempts to send message to recipient who does not exist.	Display on screen that recipient does not exist.	Invalid, table view now implemented, not search
#4	Doctor presses View Message button	Open the message for the Doctor.	Yes
#5	Doctor presses Delete on inbox screen	Delete the specific message.	Yes
#6	Doctor presses Respond on a message's page.	Send Doctor to new message page with recipient and topic pre-filled.	No, recipient pre fill functionality need to be implemented
#7	Doctor presses Delete on a message's page.	Delete message and send Doctor to the inbox page.	Yes

Use Case: Doctor View Profile & Edit Profile

Test Case #	Scenario	Expected Output	Passed?
#1	Doctor presses edit profile button	Take Doctor to edit profile page	Yes
#2	Doctor enters invalid information when editing information.	Do not allow Doctor to save incorrect information and prompt them to input correct information.	No, need to introduce user input verification

Use Case: Doctor Searches/Views Nurse List

Test Case #	Scenario	Expected Output	Passed?
#1	Doctor enters invalid characters for Nurse's first name, last name, and birthday.	Do not search for nurse and prompt user of invalid entry.	No, need to introduce user input verification
#2	Doctor enters information for a patient that does not exist or is not on the Doctor's list	Display on screen that nurse is not on list.	Invalid, patients are now listed in a table
#3	Doctor presses View Information page	Send Doctor to Patient Information page for that specific Nurse.	Yes

d)

Conclusion

This semester long project was a few our team members first time being involved in a project this long and revolving around teamwork in the software engineering scope of things. At first everyone was eager to work on the project, and the first issue we encountered was our group having too many people. The person who organized our group decided it was best for him to step away as he was the one who put us together. I think this was a stem to our communication issues.

None of us were heavily familiar with each other, and the one who put us together had been moved to another project. Coming into this project, our biggest strength was our willingness to wanting to work on the project. We all wanted to help one way or the other. I think another strength we carried into and reflected in our project was being able to put as much work as needed to get to a satisfiable reflection of the project.

Although we showed these strengths in this project, there was a very big downfall to the succession of this project. I think a big part of our downfall was our communication toward each other. For example, some people were more familiar with speaking to people in private and that kept a lot of us out of the loop. Another issue that we encountered was when having the majority of the work fall into one person's hands. Although we delegated work, some people were given smaller tasks, whether they be meaningful or meaningless toward the project.

I think the most important thing for the succession of this project is having people communicating well and being delegated work evenly and fairly within each other. Communication needs to happen between all the team members and not part of the team members. I also think it's important to keep everyone in the project in the loop.

Statistics:

e)

Identified data entities

Patient
Nurse
Doctor

E-R diagram