Team 3

Instructions:

Run our program on 64 bit JVM. JDK 1.7 or greater is required.

Unzip the file. Change your current directory to where the .jar file is located. Make sure jdbc.properties is in the same directory as the .jar file. To run, double click .jar file or run it in the terminal with java -jar <file location/Medicord.jar> and it will launch the program. Create an account and login to proceed to the rest of the functionality.

Database is already set up. However, if you need to clear it, execute the ClearDb.jar with same instruction as above. Keep theses files in the same directory.

List of Defects:

No	Defects	Resultant Output Before Seeding	Resultant Output After Seeding	Suggested correction	Black / white box testing	Severity
	CREATE ACCOUNT					
1	Create Account does not tell user if username is taken already	Create Account prompts user that username already exists	No prompt given to user	Do null check and return prompt if username is duplicate	Black box	1
2	Null password is not being checked on account creation	Prompt user if password is null.	Accept null password.	Enforce password checking before creating account	Black box	1
3	Null username is not being checked on account creation	Prompt user if username is null	Accept empty username, program will crash	Enforce username checking before creating account	Black box	1
4	On account creation, password and	Prompt user if password and	Ignore confirm password, create	Check if password	Black box	3

	confirm password do not match	confirm password do not match	account using the first password field	match before account creation	
5	Clicking the close button on Create Account module causes the application to close	Close the create account frame, show the login form back.	Hide the current active Create Account page. The Create Account page is still left hanging as a process	Close the create account frame, show the login form back	Black box	2
6	The only way to get back to login component from createAccount is to make an account.	The cancel button redirects you back to login	The cancel button does nothing	Fix cancel button to actually redirect you back to login	Black box	3
7	Password can be longer than 12 characters	Prompt user that password is too short	Program accepts password without checking the length	Check the length of the password before account creation	Black box	3
8	Password can be shorter than 5 characters	Prompt user that password is too short	Program accepts password without checking the length	Check the length of the password before account creation	Black box	3
9	Username can be longer than 20 characters	Prompt user that username is too short	Program accepts username without checking the length	Check the length of the username before account creation	Black box	3
10	Username can be shorter than 5 characters	Prompt user that username is too short	Program accepts username without checking the length	Check the length of the username before account creation	Black box	3
11	Create Account does not inform user account is created	Prompt user to inform them that the account was created	Program does not inform user, only insert into database.	Add a joptionpane to alert the user	Black box	3
12	Create Account page	Password and	Display password	Use	Black box	3

	does not hide password and confirm password fields	confirm password field are displayed as dots when typing	and confirm password as it is	JPasswordField for password textbox		
13	If you create an account without selecting patient or doctor the account is not created	Patient option button is selected by default	Patient option is not selected by default.	Set patient option to checked	Black box	2
14	The radio buttons for doctor and patient are not grouped together	You can only select either doctor or patient	You can select both doctor and patient radio buttons simultaneously	Add a button group to make sure only one can be selected	Black Box	2
15	Exiting terminates the whole program rather than just this form.	You can exit the form without shutting the whole thing down	You can't exit the form without a total shutdown	Set the visible of login to true	Black Box	2
16	No checking for special characters in the username creation.	Special characters are caught	Special characters are not caught	Check for characters that are not alphanumeric in the username before approving it	Black Box	2
17	No checking for special characters in the password section	Special characters are caught	Special characters are not caught	Check for characters that are not alphanumeric in the password before approving it	Black Box	2
	LOGIN					
18	Login form is still visible even upon successful sign in	Login form is hidden to prevent multiple logins	Login form is shown.	Set the visibility of login form to false	Black box	3
19	Doesn't prompt user	Prompts user	No prompt, Null	Add check to	Black box	3

	of incorrect login	incorrect password	pointer exception error	handle this error to prompt user of invalid input.		
20	Login form doesn't prompt user for blank username	Prompt user for a username	No prompt, Null pointer exception error	do textfield empty check	black box	3
21	Login form doesn't prompt user for blank password	prompts user for a password	No prompt, Null pointer exception error	do textfield empty check	black box	3
22	Password is not hidden when typing in login form	Password is displayed as dots when typing	When typing, password is displayed as is	Use JPasswordField for password textbox	Black box	3
23	Password box is not cleared out upon successful log out.	Password is cleared when you logout	Password is still in the login	Set the password text field to blank upon successful login	Black box	3
24	Username box is not cleared out upon successful log out	Username is cleared when you logout	Username is still in the login	Set the username text field to blank upon successful login	Black box	3
	PATIENT FORM					
25	Greetings say "welcome null" on the very first sign in	Greetings say "welcome" first, "welcome <username>" after name is added	Greetings say "welcome null"	Check if name is empty before displaying it.	Black box	3
26	View appointment information shows appointment info for the appointment below the one selected	Appointment info shows information for the appointment selected	Appointment info shows information for the appointment below the one selected	Subtract one from the selected row so it uses the correct index	Black box	2

27	Emergency contact phone number saves characters in the database.	Prompt user for inserting non-digit characters	Blindly store those characters into the database	Check every character in the phone number field	Black box	3
28	Emergency contact phone number saves phone numbers with incorrect amount of digits (not 7 or 10).	Prompt user for inserting invalid phone numbers	Blindly store those numbers into the database	Check the length of the phone number before inserting/updating	Black box	3
29	When no appointment is selected and view appointment is clicked, there will be an exception error.	Prompt user that he needs to select an appointment first before viewing it	allow user to attempt to view an appointment and it is caught by the try catch	Check to make sure user selects an appointment before attempting the operation	black box	2
30	Date of birth can be in the future	when user clicks save inform user he/she must select a dob from the past	allow user to use any date even if its in the future	check when user clicks save information whether date is in the past or future and inform user	black box	3
31	Current medication allowed more characters than the space in the database for the current medication field.	Program informs user if they try to input more characters than the database can hold	program lets user try to put any amount of characters into the database which gets caught in a try catch	check when the user tries to put in more characters than is allowed and inform user	black box	2
32	Allergies allowed more characters than the space in the database for the allergy field.	Program informs user if they try to input more characters than the database can hold	program lets user try to put any amount of characters into the database which gets caught in a try catch	check when the user tries to put in more characters than is allowed and inform user	black box	2
33	Medical history textbox allowed more characters than	Program informs user if they try to input more	Program lets user try to put any amount of	Check when the user tries to put in more	black box	2

	the space in the database for the medical history field.	characters than the database can hold	characters into the database which gets caught in a try catch	characters than is allowed and inform user		
34	Name field allows more characters than the database has space for.	Program informs user if they try to input more characters than the database can hold	Program lets user try to put any amount of characters into the database which gets caught in a try catch	Check when the user tries to put in more characters than is allowed and inform user	black box	2
35	Patient can select both male and female radio buttons at the same time	User can only select one gender at a time	User can select both genders at the same time	Add a button group to make sure only one is selected at a time	black box	2
36	Patient can put non-alpha numeric characters for his name	The program would notify the user if he or she tries to enter in a incorrect char	The program doesn't notify the user if he or she enters an incorrect char	Check if the name of patient contain non-alphanum eric characters	black box	3
37	Exception error when no appointment is selected to delete	The program will notify the user if they try to delete an appointment without selecting it	The program allows the user to attempt to delete an appoint without selecting one. This is caught in a try catch	Check if an appointment is selected before allowing the user to delete it and notify the user	black box	2
38	No dialogue prompt to inform user appointment deleted	When the user deletes an appointment the program notifies the user that the appointment was deleted	When the user deletes an appointment there is no feedback to tell them the appointment was deleted	Notify user when a appointment is deleted	black box	2
39	Table doesn't update after deleting	The appointment table updates after an	The appointment table doesn't update after an	Update the appointment table after	black box	2

		appointment is deleted	appointment is deleted	deleting		
40	Deleting an already deleted appointment causes database error	The user is notified if they try to delete an already deleted row	The user is able to delete an already deleted row causing an sql exception	Check if appointment exists before attempting to delete it and notify the user	black box	2
41	ResultSets are not being closed in patient module	The result set is closed after the patient form is done with it	When the patient form pulls a result set from the database it does not close the result set.	Close the result set when the patient form is done with it	white box	3
42	Sort by date in patient form doesn't really sort by date	The dates are sorted by date rather than alphabetical	The dates are sorted alphabetical order rather than by the date	Set the model to format column 3 as dates rather then text	black box	3
43	Patient is able to make an appointment before they input a name in the information tab.	The user is notified to enter a name prior to being able to make appointments	The user is not notified to enter a name before making appointments.	Check if user has entered a name before he or she makes an appointment and notify the user	black box	2
44	User is able to enter whitespace char as a name without anything else or to look like they have the same name as someone else	Program trims whitespace chars and checks to make sure entry is not empty.	Program treats whitespace chars as normal characters	Trim the name and make sure it is not empty	Black box	2
45	No prompt to let user know patient info is saved after the save button is clicked	Prompt user that information is saved	Does not give any message that information is saved	Have a prompt display when successful data save	Black box	2
	DOCTOR FORM					

46	Doctor can put non-alpha numeric characters for his name	Program does not allow non-alpha numeric characters. Give warning.	Program blindly accepts and stores the inputted value into database.	Check if the name of patient contain special characters.	Black box	2
47	Doctor account information does not change GUI display message from "Welcome <default name>!" even after logout and login.	When name is filled and not null, change welcome message.	Ignore the changes made in the account by user. Greeting message never changes.	Check if name is not empty, change the default greeting message.	Black box	3
48	If no appointment selected and view appointment is clicked, there will be an exception error.	Prompt user to select an appointment.	Program tries to find information on an invalid index in the table. Program crashes	Check if user has selected a specific appointment	Black box	2
49	Phone number saves characters in the database.	Check if user inputted phone number contains non-digit characters. Set the phone number as blank.	Program blindly accepts and stores the inputted phone number into the database	Check if user inputted phone number contains non-digit characters.	Black box	3
50	Phone number saves phone numbers with incorrect amount of digits (not 7 or 10).	Prompt user that an invalid phone number is received.	Program blindly accepts and stores the inputted phone number into the database	Check the length of the phone number before updating information	Black box	3
51	Name field allows more characters than there is space allotted in the database.	Prompt user that character limit exceeded.	Program blindly accepts and tries to store the inputted value into the database. If the name field contains more than 20 characters, program will crash.	Create a key event listener that limits the number of characters typed into the textfield.	Black box	2
52	Specialties field	Prompt user that	Program blindly	Create a key	Black box	2

	allows more characters than there is space allotted in the database.	character limit exceeded.	accepts and tries to store the inputted value into the database. If the specialities field contains more than 20 characters, program will crash.	event listener that limits the number of characters typed into the textfield.		
53	Hospital field allows more characters than there is space allotted in the database.	Prompt user that character limit exceeded.	Program blindly accepts and tries to store the inputted value into the database. If the hospital field contains more than 20 characters, program will crash.	Create a key event listener that limits the number of characters typed into the textfield.	Black box	2
54	Phone field allows input when there is not a valid phone number.	Prompt user that character limit exceeded.	Program blindly accepts and tries to store the inputted value into the database. If the phone number field contains more than 20 characters, program will crash.	Create a key event listener that limits the number of characters typed into the textfield.	Black box	2
55	Logout button just hides the doctor form instead of disposing it.	Show the login form. Dispose current form.	Set visibility of doctor form to false. This can cause program to run slowly if tested repeatedly.	Dispose the doctor form module and set the visibility of login form to true	Black box	2
56	Doctor form should not show the doctor id, its internal data	Doctor id is not diplayed on the doctor form	Id is being shown on the form page	Remove the labels so they are not being	black box	3

				displayed		
57	Doctor can have male and female radio buttons selected at the same time	User can only select one of the radio buttons.	User can select both radio buttons.	Add a button group so that only one radio button can be selected at one time	Black box	3
58	If no appointment selected and remove appointment is clicked, there will be an exception error.	Prompt user to select an appointment.	Program tries to find information on an invalid index in the table. Program crashes	Check if user has selected a specific appointment	Black box	2
59	No dialogue prompt when no appointment selected to delete	Prompt user that record has been deleted, then delete the actual record in the database.	Only delete the record in database.	Create a message box to user	Black box	3
60	The appointment table does not update after deleting an appointment entry	Delete the record in database. Update current table in the form.	Only delete the record in database. If appointment is viewed later, program may crash	Repopulate the list of appointments.	Black box	2
61	Sorting by date in appointment tab in Doctor Form doesn't sort by date.	Column should sort by dates.	Column sorts by the string of each date.	Change the objects to Date objects when inputting into the table.	Black box	3
62	Doctor Account Information Form: If user enters in any characters for name, including the space character, it is saved as a valid entry.	Does not allow white space to be a valid name	Allows and character to be part of a name	Do a check to make sure it is not just whitespace as the name	Black box	2
63	No prompt to let user know doctor info is saved when it is	There is a prompt to tell the user information is saved	There is no prompt to inform the user of saved info	Have a prompt display when successful data save	Black box	3

	MAKE APPOINTMENT					
64	Pressing close button or schedule on the make appointment form will bring back the patient form even if you logout	Pressing cancel closes the appointment form and doesn't bring back the patient form	Pressing cancel brings back the patient form even when logged out	Make the appointment form not bring back the patient form	Black box	2
65	You can create an appointment without entering a date	It notifies you if you try to make an appointment without a date	it lets you attempt to make an appointment without a date	make the appointment form notify you if you try to make an appointment without a date entered	Black box	2
66	User can make an appointment in the past	It notifies you if you try to make an appointment in the past	It lets you make an appointment in the past	make appoint form notify you if you try to make an appointment in the past.	Black box	2
67	Pressing the "schedule" button with empty fields do not give any warnings	It notifies you that you are missing some information for making appointments (appointment date, doctor name, reason for visit)	The program does not give any warning.	Check if the necessary information has been correctly filled in	Black box	3
68	Reason allowed more characters than there was space in the database for.	Notifies the user that the character limit has been reached.	Does not notify the user about the limit.	Check if the text is larger than the space available in the database.	Black box	3
69	If no doctors are in the database, clicking look at info will cause an exception error	A popup will say that no doctors have been found in the database and not allow usage of the	The program does nothing to prevent users from viewing/scheduli ng without a	Display a message saying no doctors have been found and disable the	Black box	2

		view/schedule buttons.	doctor.	view and schedule buttons.		
70	If no doctors are in the database, clicking 'schedule' will cause an exception error.	A popup will say that no doctors have been found in the database and not allow usage of the view/schedule buttons.	The program does nothing to prevent users from viewing/scheduling without a doctor.	Display a message saying no doctors have been found and disable the view and schedule buttons.	Black box	2
71	White space from hiding "notes" box is still there	JFrame is packed	JFrame is not packed and shows empty space	pack the jframe	Black box	3
72	Doctor with null as name visible in select doctor list	Does not let you choose a doctor with no name	Shows blank name for doctor with no name	Do a null check before adding the doctor into the list	Black box	2
73	Exiting closes the program rather than just this form.	Make the form dispose on close rather than exit.	Form exits on close.	Change on close operation to dispose.	Black box	3
74	After cancelling an appointment, the appointment table is not updated.	Appointment table should not show the cancelled appointment.	Appointment table shows the cancelled appointment.	Run updateApptTable() after cancelling an appointment	Black box	2
75	No prompt if no appointment is selected to be cancelled(deleted).	Tell user an appointment wasn't selected.	There is no prompt to the user and program receives an exception error.	Show a dialog box that an appointment wasn't selected.	Black box	2
76	Appointment id is determined by uuid.getMostSignificantBits() potentially could cause a unique constraint error.	No appointment id is the same.	Currently there is a 1 / 2^29 chance of the same aid being made.	Because of low probability of being the same,, it has not been changed.	White box	2
77	ResultSet are not	Close the result	Result sets stay	Close result	White	3

	closed in the make appointment module	sets	open until disposed	sets	box	
	VIEW APPOINTMENT					
78	Using column index in JTable so switching columns will cause feature to be unusable until it is moved back to its original column index	Column headers aren't switchable	Column headers are switchable.	Make the column header not adjustable	Black box	2
79	(Doctor) Notes allowed more characters than space in the database.	Display a character limit reached message	Lets the user keep typing	Check the length of text in the text field isn't larger than the space allotted in the database.	Black box	2
80	For a long input to notes the form is messed up causing users issues	long inputs don't affect form and has a scroll bar for viewing notes	the notes went all the way over to the right and there was no scroll bar on it	change the notes from jtextfield to jtextarea	Black box	2
81	Closing View appointment exits entire program	Disposes view appointment page	Closing window closes entire program	Change on close operation to dispose.	Black box	3
82	Reason for visit text field has no word wrap enabled	Text field should wrap characters.	Text field doesn't wrap characters.	Enable word wrap.	Black box	3
83	Notes text field has no word wrap enabled	Text field should wrap characters around.	Text field doesn't wrap characters around.	Enable the word wrap property or notes.	Black box	3
84	ResultSets are not being closed in this module	Program closes the ResultSets	Result sets are closed after being used	Close result sets	White box	3
	VIEW PATIENT					

		/DOCTOR PROFILE				
85	Exiting viewPatient popup closes entire program	Pressing the x on view profile just closes view profile as opposed to just closing the view profile page	pressing x just closes view profile page	make view profile dispose on close rather than exit on close	Black Box	1
86	Exiting viewDoctor popup closes entire program	Pressing the x on view profile just closes view profile as opposed to just closing the view profile page	pressing x just closes view profile page	make view profile dispose on close rather than exit on close	Black Box	1
87	View patient profile page lets you edit text boxes when they should be disabled	Text boxes are disabled	Text boxes are editable	Change text box property disabled		2
88	View doctor profile page lets you edit text boxes when they should be disabled	Text boxes are disabled	Text boxes are editable	Change text box property disabled		2
89	Current Medication text area has no word wrap enabled	Style of wrapping (used if the text area is wrapping lines) set to true the lines will be wrapped at word boundaries (whitespace) if they are too long to fit within the allocated width.	Style of wrapping (used if the text area is wrapping lines) set to false, the lines will be wrapped at character boundaries. By default this property is false.	Change word wrapping value.	Black box	3
90	ResultSets are not being closed in view patient/doctor	When the view form pulls a result set from the database it does not close the result set	The result set is closed after the view form is done with it	The result set isn't closed at all.	White box	3
91	Allergies text area	Style of wrapping	Style of wrapping	Change word	Black box	3

	has no word wrap enabled	(used if the text area is wrapping lines) set to true the lines will be wrapped at word boundaries (whitespace) if they are too long to fit within the allocated width.	(used if the text area is wrapping lines) set to false, the lines will be wrapped at character boundaries. By default this property is false.	wrapping value.		
92	Medical history text area has no word wrap enabled	Style of wrapping (used if the text area is wrapping lines) set to true the lines will be wrapped at word boundaries (whitespace) if they are too long to fit within the allocated width.	Style of wrapping (used if the text area is wrapping lines) set to false, the lines will be wrapped at character boundaries. By default this property is false.	Change word wrapping value.	Black box	3
	IMPORTDB					
93	Users could insert sql injections into our database	users can put ' freely without it affecting the database or allowing sql injection	User could put a ' to close the statement then put a sql statment of their own. this also caused crashes with the use of '	use protected statement to execute statements rather than normal statements	White box	1
94	Database is not inserting emergency contact number	Emergency contact number is getting saved	Emergency contact number is not being inserted into the database	Edit the sql statement to include emergency contact	Black box and white box	2
95	Duplicate username is not being checked in the database.	Database does not create account	Database creates duplicate account	Make username primary key	Black box	1

96	Login will accept incorrect passwords as the password contains a %-wildcard char after the starting chars or just the % char	Login won't let you login using the wildcard char unless its part of the password	Login will let you login using the wildcard char	Change the select sql statement from like to =	black/white box	1
97	Login will accept incorrect usernames with a % char	Login won't let you login using wildcards unless its part of the password	login will let you login using wildcards	change the select sql statement from like to =	black/white box	1
98	Patient Table does not have a primary key and cannot be referenced uniquely	Pid is the current primary key	No primary keys are in the database	Add primary key in the patient table	White box	1
99	Doctor Table does not have a primary key and cannot be distinguished	There is a primary key in doctor table	There is no primary key	Add primary key did to doctor database	White box	1
100	No primary key in the appointment table	Appointment id is the primary key in the appointment table	There is no primary key in appointment table	Add primary key to the appointment table	White box	1