

		Team 4	White box testing: Medicord	
	Black Box Defects			
	Defect Description	Fix	Module Location	Severity
1	Code doesn't check if text boxes are empty	Add code to check if there is text in the fields	Login	3
2	Code doesn't check if text boxes contains invalid characters	Use java regex to make sure special characters aren't passes to prevent nasty things such as SQL injection	Login	1
3	Code doesn't check if the UserID return from the database is valid	Add code to make sure that it isn't null or 0	Login	2
4	Code doesn't handle the condition if the username and password pairing are incorrect.	Add code to notify the user the information that was entered is incorrect	Login	3
5	Passwords are visible.	Use the Java Swing JPasswordField instead of a JTextField for password input.	Login	1
6	Code doesn't check usernames for proper length or invalid characters	Add code to check username length and java regex to check for invalid characters	CreateAccount	1
7	Code doesn't check passwords for proper length or invalid characters	Add code to check password length and java regex to check for invalid characters	CreateAccount	1
8	No check to make sure that the password and password verification fields are the same	Add a string comparison	CreateAccount	1
9	When making an account it doesn't check to make sure the other account type bubble isn't selected	Add code to make sure that the account creation type is an exclusive event	CreateAccount	2
10	There is no code in place to make sure that the information retrieved from the database is correct for patient accounts	Add a check to make sure that garbage was not received and handle it accordingly	CreateAccount	2
11	If an account is created with no bubble checked then the program does nothing	Add code to notify the user	CreateAccount	3
12	Account can be created with username that is blank or whitespace.	Add code to check username length in such a way that an empty string will not cause a crash.	CreateAccount	2
13	Account can be created with password that is blank or whitespace.	Add code to check password length in such a way that an empty string will not cause a crash.	CreateAccount	2
14	Account can be created with both "Patient" and "Doctor" selected.	Add code to tie handlers of radio buttons together and make them mutually exclusive.	CreateAccount	2
15	Account can be created with non-matching passwords.	Add code to insure that passwords match on account creation, and display a warning if they do no match.	CreateAccount	1
16	Instead of having unique patient lists, all Doctor accounts have access to all appointments made with all Patients and all other Doctors.	Instead of having unique patient lists, all Doctor accounts have access to all appointments made with all Patients and all other Doctors.	Doctor View	1
17	As a doctor, when a Category at the top of the Patient List is clicked, the list should sort by that Category. It does not.	Add a default Java Swing column sorter to the appointment table. tblAppointments. setAutoCreateRowSorter(true); af 105 in frmDoctor.java	Doctor View	3
18	If a Patient creates an appointment with a Doctor, the Doctor's appointment list is not updated until the next login.	Added a refresh button that manually updates the appointment list	Doctor View	2

19	When a doctor clicks the Remove button on the patient list, the patient should be removed. Instead, they remain until next login.	Added a refresh button that manually updates the appointment list	Doctor View	2
20	If a Patient cancels an appointment with a Doctor, the Doctor's appointment list is not updated until the next login.	Added a refresh button that manually updates the appointment list	Doctor View	2
21	On the Doctor View page, the 'Male' radio button is already selected and cannot be unselected.	Make radio button selectable and make it exclusive with the 'Female' radio button.	Doctor View	3
22	On the Doctor View page, the 'Female' and 'Male' radio buttons can be selected at the same time.	Tie the handlers of the two gender radio buttons together and make them exclusive.	Doctor View	3
23	As a doctor, when a Category at the top of the Patient List is clicked, the list should sort by that Category. It does not.	Add a default Java Swing column sorter to the appointment table. <code>tblAppointments.setAutoCreateRowSorter(true);</code> at 105 in <code>frmDoctor.java</code>	Doctor View	3
24	When a doctor updates his name information, the <default name> in the greeting should update. Instead, it remains.	When doctor information is updated and saved, force a refresh of the page and get the updated doctor info from the database.	Doctor View	3
25	Since app does not ask for time entry or check for conflicts patient is able to schedule multiple appointments for the same day with the same doctor, when there could be a conflict	Ask for time entry and check for conflicts when patient makes appointments.	Appointments	1
26	If letters are entered into the date, nothing appears. Should have a message indicating to enter date.	Check that numbers are entered, if entry is incorrect display error message indicating proper entry.	Appointments	3
27	Sorting by Date incorrect (maybe lexicographic?) for example, descending by dates puts 11/15/14 after 11/3/00 and 12/12/12 before 11/03/55.	Use the default Java Swing column sorter to get the desired behaviour.	Appointments	3
28	Clicking View Info when no Doctor Selected causes a index out of bounds stack dump in terminal. (Only possible when no doctors registered)	Create a check to insure that the selection index is a valid index before processing.	Appointments	2
29	Able to schedule appointment without entering any information	Add checks for valid entry.	Appointments	1
30	Able to schedule appointment for dates that have already passed	Add checks for valid entry.	Appointments	1
31	Able to schedule appointment without entering any date.	Add checks for valid entry.	Appointments	1
32	Able to schedule duplicate appointments of the same date, doctor, and reason	Add checks for valid entry.	Appointments	1
33	Able to schedule appointment for date with doctor without stating a reason.	Add checks for valid entry.	Appointments	1

34	Able to schedule appointment without entering any date.	Add checks for valid entry.	Appointments	1
35	Emergency contact number does not appear to be saved anywhere. It is not persisted across sessions.	Add SQL column to store the emergency contact number, and code to save this number on account information update.	Account Information	3
36	In Allergies: Special characters such as the single quote as would be used in "Sam's cat" cause the SQL statement to fail, but from a user perspective no signs of failure.	Use built in Java sql sanitation (through preparedStatement) to insure that special characters are properly escaped before being insert into the database.	Account Information	1
37	In Current Medication: Special characters such as the single quote as would be used in "Sam's cat" cause the SQL statement to fail, but from a user perspective no signs of failure.	Use built in Java sql sanitation (through preparedStatement) to insure that special characters are properly escaped before being insert into the database.	Account Information	1
38	In Medical History: Special characters such as the single quote as would be used in "Sam's cat" cause the SQL statement to fail, but from a user perspective no signs of failure.	Use built in Java sql sanitation (through preparedStatement) to insure that special characters are properly escaped before being insert into the database.	Account Information	1
39	Dates Aggressively fixed: 13/13/13 becomes 1/13/14. Anything not in MM/DD/YY format removed after typed. Input fields should not be modified while being accessed	User should be notified of error and correct format.	Appointments	1
40	"Cancel appointment" button does not trigger view to update.	Appointment should be removed from list.	Appointments	1
41	Sometimes scheduled appointment does not appear until close clicked when scheduling appointments.	Appointment should added to view right away.	Appointments	1
42	Clicking View Appointment Information with out anything selected causes Index out of bound exception to trigger stack dump (non-fatal).	Add bounds checking.	Appointments	2
43	Clicking Cancel with out anything selected causes Index out of bound exception to trigger stack dump (non-fatal).	Add bounds checking.	Appointments	3
44	Sorting by Appointment Number sorts lexographically instead of in natural numbering order.	Use the default Java Swing column sorter to get the desired behaviour.	Appointments	2

45	View Appointment shows the appointment info for the next appointment after the one selected (by appointment id). If the appointment with the greatest id is selected it causes an index out of bounds exception dump in the terminal. (Off by one error)		Appointments	1
	Defect Description	Fix	Module Location	Severity
60	White Box Defects			
61	Creation of patient account doesn't include a check of success or failure, it just assumes that it succeeds.	Add code to check for successful patient account creation, and notify the user of an error when it happens and tell them to try again	createAccount.java:218	2
	Username verification code is commented out, which causes the method to always return true.	Uncomment null and size check.	createAccount.java: userVerified()	1
62	Password verification code is commented out, which causes the method to always return true.	Uncomment null and size check.	createAccount.java: passwordVerified()	2
63	Password equality check is commented out in account creation.	Uncomment password and passver check to make sure the user has typed in the same password before creating their account.	createAccount.java:209	2
64	In processing the Doctor phone number, number lengths other than 7 and 10 are not allowed. This removes the possibility of using numbers of countries that use a different length numbers for their telephone numbers.	Allow regional numbers by only checking the phone number to insure that the entries are all digits, not by checking the length against american standards.	frmDoctor.java:422	3
65	Login button has commented out code that checks if text boxes contain text	Uncomment the checks	Login.java	3
66	Code that notifies the user of an incorrect password/username combo is commented out	Uncomment the check of the username and password	Login.java	3
67	All types are VARCHAR/VARCHAR2. Could cause issues if try to sort by date, etc.	Change to appropriate SQL data types.	Importdb.java:30	3
68	Improper sql statement preparation for sign in	Change to prepared statement.	Importdb.java:78	1
69	Creating id from count executed in separate query, id not guaranteed to be unique. (must be unique -- primary key)	Use built in auto-increment type for identifier.	Importdb.java:108	2
70	Improper sql statement preparation for check of user existence.	Change to prepared statement.	Importdb.java:120	1
71	re-use of patientTest variable for insertPatient statement. Correct behavior, but could lead to bugs.	Use separate, descriptive variables for different statements.	Importdb.java:137	3
72	Improper sql statement preparation for account creation.	Change to prepared statement.	Importdb.java:148	1
73	Improper sql statement preparation for patient profile update	Change to prepared statement.	Importdb.java:173	1

74	Method has parameter for econtact, parameter ignored.	Add econtact field to table, include in statement.	Importdb.java:173	2
75	Improper sql statement preparation for doctor profile update	Change to prepared statement.	Importdb.java:200	1
76	Improper sql statement preparation for making appointment	Change to prepared statement.	Importdb.java:227	1
77	Improper sql statement preparation for getting user info.	Change to prepared statement.	Importdb.java:260	1
78	Selecting appointment for doctor gets all appointments, not just one with the specific doctors id.	Add where statement to filter by doctor id.	Importdb.java:287	2
79	Improper sql statement preparation for viewing appointments	Change to prepared statement.	Importdb.java:289	1
80	getListOfDoctorNames takes patient id, but returns all Doctors. Suggests defect in design or behavior.	Depending on desired behavior, remove parameter for patient id or add filter.	Importdb.java:313	3
81	If account does not exist, resource not properly closed (however, will be automatically closed by garbage collector eventually)	Close in finally block.	Importdb.java:352	3
82	Improper database access(1) for saving appointment notes.	Change to prepared statement.	Importdb.java:396	1
83	GUI.java: dead code?	Remove file.		2
84	signindb returns null if user doesn't exist. Calling functions on null will throw a Null Pointer Exception. Directly connects to Database. This leaves the database account's credentials viewable to the user.	Add null check to gracefully handle login failure.	Login.java:136	3
85	Male-Female treated internally as exclusive, but can both be pressed	Handle actual queries on remote server.	General	1
86	Welcome message displayed even if patient name unset (null).	Add female and male radio buttons to radio button group.	frmPatient:initComponents	2
87	Excessive operations for task performed, all in one line. No verification of results of each step (which have error conditions).	Add null check before setting welcome message, custom welcome message if unset.	frmPatient:362	2
88	Possible off by one error. Associating row number with data at rowNum-1 in model.	Refactor code to do less conversions. Break into several steps and check error conditions after each step.	frmPatient:411	2
89	Excessive operations for task performed, all in one line. No verification of results of each step (which have error conditions).	Either use index-1 later to retrieve data or zero-index.	frmPatient:495	1
90	Application closes if "X" is hit to close window in	Refactor code to do less conversions. Break into several steps and check error conditions after each step.	frmDoctor:391	2
		Change "EXIT_ON_CLOSE" to "DISPOSE_ON_CLOSE"	appointment.java:29	3