

System Testing through GUI

Class name: Date Method signature: public boolean isValid() {} //check if a given date is a valid calendar date			
Test Case #	Requirement	Test description and Input Data	Expected result/output
1	Number of days in February for a non-leap year shall be 28. The method shall return false, and the GUI shall not accept the date input and will automatically input February 28th instead if the date given has 29 days for a non-leap year.	Launch the GUI and input a birth date where the month = 2, day > 28, and the year is a non-leap year Test data: <ul style="list-style-type: none"> • In "open" tab • Date of birth: "2/29/1981" 	False GUI changes birth date input to 2/28/1981.
2	Number of days in February for a non-leap year shall be 28. The method shall return true, and the GUI shall accept the date input if the date given has 29 days for a leap year.	Launch the GUI and input a birth date where the month = 2, day = 29, and the year is a leap year Test data: <ul style="list-style-type: none"> • In "open" tab • Date of birth: "2/29/2008" 	True GUI accepts birth date and keeps input as is.
3	Valid range for the month shall be ≥ 1 and ≤ 12 . The method shall return false, and the GUI will clear the user input for a month value outside the valid range.	Launch the GUI and input a birth date where the month > 12 or < 1, and the day and year are valid. Test data: <ul style="list-style-type: none"> • In "open" tab • Date of birth: "13/5/2001" 	False GUI clears user input.
4	Valid range for the day of a long month shall be ≥ 1 and ≤ 31 . The method shall return false, and the GUI will clear the user input for a day value outside the valid range for a long month.	Launch the GUI and input a birth date where the day > 31 or < 1, the month is a valid long month, and the year is valid. Test data: <ul style="list-style-type: none"> • In "open" tab • Date of birth: "3/32/2001" 	False GUI clears user input.

5	Valid range for the day of a short month shall be ≥ 1 and ≤ 30 . The method shall return false, and the GUI shall not accept the date input and will automatically input the 30th day instead if the date given contains a short month.	Launch the GUI and input a birth date where the day =31, the month is a valid long month, and the year is valid. Test data: <ul style="list-style-type: none"> • In "open" tab • Date of birth: "4/31/2000" 	False. GUI changes birth date input to 4/30/2000.
6	Valid range for the year shall be positive. The method shall return false, and the GUI will clear the user input for a negative year value.	Launch the GUI and input a birth date where the year is negative and the day and month are valid. Test data: <ul style="list-style-type: none"> • In "open" tab • Date of birth: "10/5/-2000" 	False GUI clears user input.
7	A profile must be over 16 to open an account. The method shall return false, and the GUI will say the date of birth is invalid.	Launch the GUI and input a birth date with valid inputs, except the year is greater than 2007. Test data: <ul style="list-style-type: none"> • In "open" tab • First name: "Bob" • Last name: "Stewart" • Date of birth: "2/29/2008" • Deposit amount: 1000 • Press "open" button 	False GUI text field outputs "DOB Invalid: 2/29/2008 under 16."

Class name: AccountDatabase Method signature: public boolean open(Account account) {} //returns true if account was opened, false if account already exists			
Test Case #	Requirement	Test description and Input Data	Expected result/output
1	The account can only open if it doesn't exist in the database. The method shall return false, and the GUI shall not accept the account and will say that the account already exists if the inputted account already exists	Launch the GUI and input valid account information, and open the account. Create a duplicate account with the exact same account information Test data: <ul style="list-style-type: none"> • In "open" tab • First name: "Bob" • Last name: "Stewart" • Date of birth: "2/29/2000" • Deposit amount: 1000 • Press "open" button • Repeat 	False GUI text field outputs "Bob Stewart 2/29/2000 (C) is already in the database."

Class name: AccountDatabase Method signature: public boolean close(Account account) {} //returns true if account was close, false if account doesn't exists			
Test Case #	Requirement	Test description and Input Data	Expected result/output
1	The account can only close if it exists in the database. The method shall return false, and the GUI shall not accept the account and will say that the account already exists if the inputted account already exists	Launch the GUI and input valid account information, and open the account. Create a duplicate account with the exact same account information Test data: <ul style="list-style-type: none"> • In "open" tab • First name: "Bob" • Last name: 	False GUI text field outputs "Bob Stewart 2/29/2000 (C) is already in the database."

		<p>"Stewart"</p> <ul style="list-style-type: none">• Date of birth: "2/29/2000"• Deposit amount: 1000• Press "open" button• Repeat	
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