

Criterion B: Design

Test Plan:

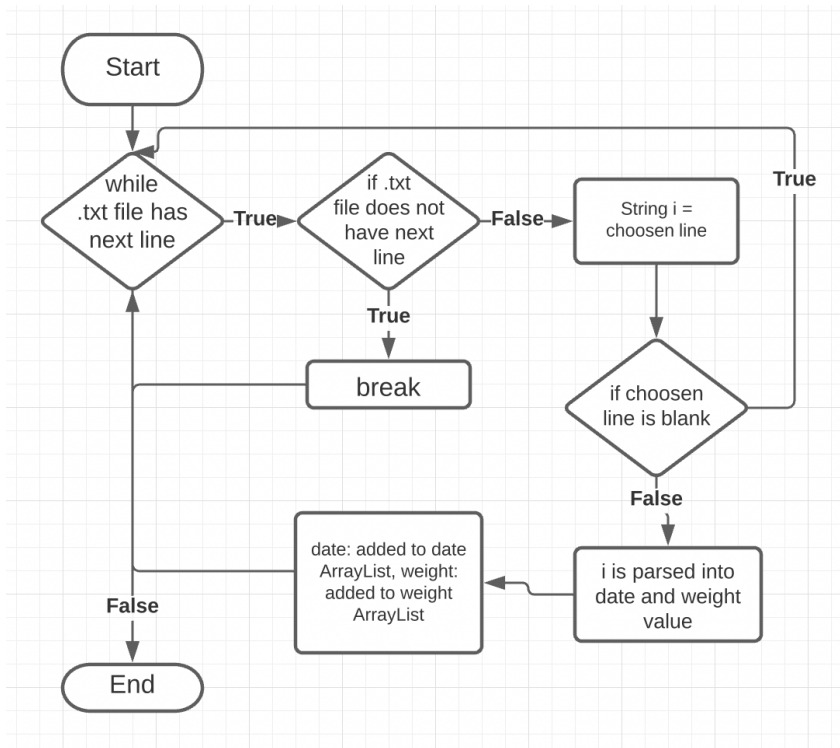
<i>Test Type</i>	<i>Nature of Test</i>	<i>Example</i>
When starting program, calculator GUI should show	Check that GUI is displayed correctly	*GUI is displayed on screen*
Check that GUI is functional	JTextFields and JMenu allow user to input information and JLabels subsequently output correctly calculated ORM and RPE ORM values.	User enters "1/5/2022", chooses "Bench", enters "225" for weight, enters "5" for repetitions, enters "9" for RPE, presses "Calculate true 1RM" and "Calculate RPE 1RM" JButtons. GUI displays "262.5" for "True 1RM" and "270.0" for "1RM Considering RPE"
Check that RPE values are stored in relevant .txt files	Check .txt files after user inputs relevant data	User enters the above data. bench1ROM.txt file holds outputted data
Check that .txt files are saving previously inputted data and adding new data	Check .txt files after user inputs multiple rounds of data	User enters data. Applicable .txt file holds correct dates, calculations for ORM.
Check that myFileReader and bst class are retrieving data from .txt files correctly and sorting the data correctly	Print out data retrieved from myFileReader class and compare it to the .txt file. Print out data sorted from bst class (inOrderTransversal() method) and compare it to the "correct" order.	.txt file displays "1/5/2022:262.5 lbs", "1/1/2022:225 lbs" Data from .txt files myFileReader class retrieves "1/5/2022" and "262.5", "1/1/2022" and "225" in that order, storing the data into array lists bst class transcribes data into a binary search tree and uses an in order transversal to sort data such that "1/1/2022" comes before "1/5/2022"

Check that data can be graphically displayed	Data retrieved by myFileReader class and sorted by bst class is displayed visually on graph	*Data from .txt files shows on graph GUI*

Method Summary:

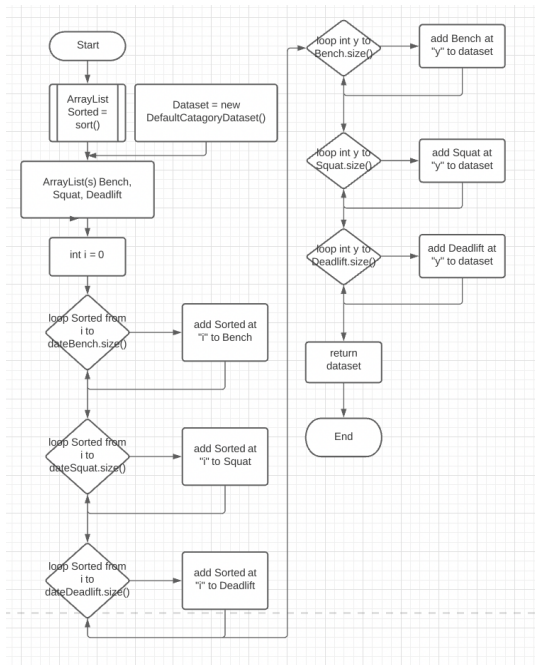
myFileReader():

populateArrayList():



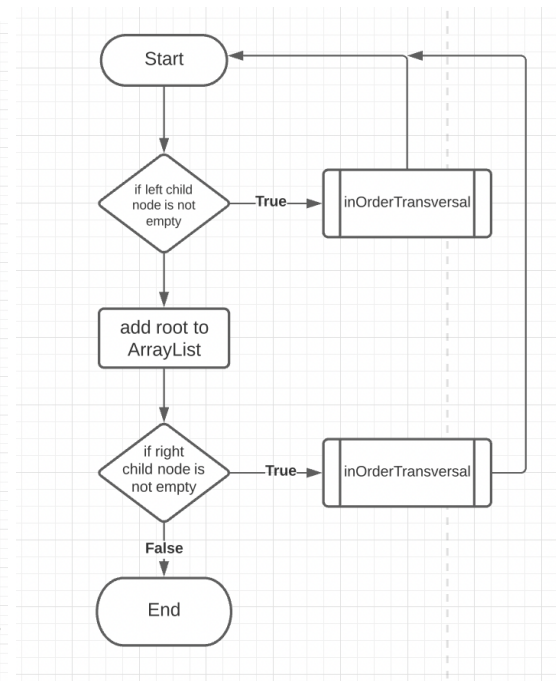
Graph():

createDataset():



bst():

inOrderTransversal():



Visual Representations of Solution:

