STEVE

METHODOLOGY

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**CONOR YATES** 

## INTRODUCTION

## WHAT WE TESTED

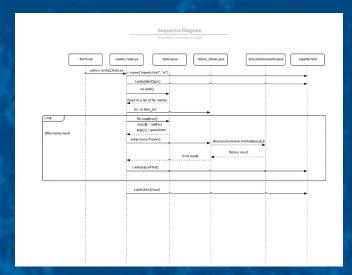
Team Steve tested Glucosio, an HFOSS app designed to help its users monitor their glucose level. We developed a driver to test five methods used in the Glucosio tool package: round(), glucoseToMgDI(), glucoseToMmolL(), glucoseToA1C(), a1cToGlucose(). All of these methods perform rounding operations to calculate various double values.

#### **OUR DRIVER**

21	public static void main(String args[1])(
	String methodName = args[0];
24	double argument - Double.parseDouble(args[1]);
	//double out = -1.0;
26	Object out;
	int argument2;
28	switch (methodName) {
29	
30	default:
31	//argument2=Integer.parseInt(args[2]);
	<pre>//out = GlucosioConverter.round(argument,2);</pre>
33	out= "invalid method called";
34	break;
35	
36	case "round":
37	//argument2=Integer.parseInt(args[2]);
38	out = GlucosioConverter.round(argument,2);
	<pre>//out = GlucosioConverterOriginal.round(argument,2); break;</pre>
	Dreak;
	case "glucoseToMgD1":
	case glucoserorgol .
44	out = GlucosioConverter.glucoseToMgDl(argument);
	break;
	case "glucoseToMmolL":
48	500 J-00 000 000 0
49	out = GlucosioConverter.glucoseToMmolL(argument);
58	<pre>//out = GlucosioConverterOriginal.glucoseToRmolL(argument);</pre>
	break;
	case "glucoseToA1C":
54	W. AND W. D. D. W. ANDERSON CO.
	out = GlucosioConverter.glucoseToA1C(argument);
56	<pre>//out = GlucosioConverterOriginal.glucoseToAlC(argument);</pre>
	break;
58	
28	case "alcToGlucose":
	<pre>out = GlucosioConverter.alcToGlucose(argument); //out = GlucosioConverterOriginal.alcToGlucose(argument);</pre>
	break:
64	ar conj
	)
66	f.
	System.out.println(out);

# OUR TESTING FRAMEWORK

We developed a script that would read test cases from a folder and give their contents to our driver, which would in turn call the methods being tested in the Glucosio package. The script would then capture the results from the driver and record them in an html file.



### **RESULTS FROM TESTING**

**RESULTS** 

All of the methods we tested depended on the round method and passed regardless of what integer value was provided. Below is an example output.

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			GlucosioConverter.java Test						
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ec ser	ii	and .	Exact coughs a dealer and material to the necessary behalf it, place. If the dealer has being agreement the scatter extens the statute with only agree.	-0.0700479433937944	-sat-	-0,87	-	9×30-000	I
True Chim 00 km	10	meet 1	$ \begin{tabular}{ll} total couples, the line of couples, to the second hadded typics. If the study has two imaging errors the netted return for classic with only one of the second couples, the second couples are the second couples and the second couples are the second coup$	1.5	.60	3366	Page 1	securion	
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March Communication Communicat	-	rest	tread couples helds and measures to the second headwalls place. If the dealth has too longing arms the seriod creates the dealth with only	1.500	2.07	1,800	tion	MAKE SELECT	
Tree Cares on on	.00	reset	Freed stocks a dealer and means to the accord anniholds place. It has to the host to suggest over the extend polaries for stability of the stability.	-2.007	9.87	-5.67	160	Normalia	
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95 (g)	10	phonomic belogged	shows Walled committee from stand places in Fig. 19.	341	91.0	***	Part	Mar-10/2001	I
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ing.		gi mariningi i	glasser hidsfull connection that topical plasmer on Might	ii.	100	m A	par.	14:w-10:2011	
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income:	10	giorne Tobacci.	glame/100 and committee layer glamm to March.	204	22	13	Page 1	Nov-10-1014	Ī

We injected faults into the Glucosio code to exercise our framework and find any faults that might otherwise not have been detected. Below is an example output.

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			GlucosioConverter.java Test						
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