Finance Tracker Requirements and Test Document

Pablo Bandera Lopez 04/11/2025 CS 225, Spring 25

Embry-Riddle Aeronautical University

Daytona Beach campus

1 Aerospace Boulevard

Daytona Beach, FL 32114

INTRODUCTION:

This document will detail the various requirements and test cases needed to have a fully functional application. This program will be a personal monthly finance tracker where the user will be able to create entries, edit entries throughout the month and view all entries that have been entered. Further details can be found in the Software Design Document.

The requirements and test cases that follow break down the application into testable units. Some requirements and test cases are designed to test program reliability and adequate function of the back-end code. Other requirements and test cases are designed to test the user interface and its ability to interact with the back-end program. Both of these types of test cases requirements are necessary for the application to function.

BACKGROUND INFORMATION:

As previously stated, further information about the specific categories, sub-categories, accounts, types, etc. Is available in the software design document. Refer to tables 1-6 to see the list of available selections and when they should become available.

REQUIREMENTS:

Table 1: Requirement Specifications

ID	Requirement Specification
1	As a tester I want to create new instance of Entry.
	1.1: A new instance can only be created when a valid entryID, entryID>0, is passed
	in the constructor.
	1.2: A new instance of Entry shall be initialized by setting all its values to −1 and
	amount to 0.0.
	1.3: The dollar amount, type, category, subcategory1-4, account, attributes shall
	only be settable to a value greater than 0 after being initialized. An
	InvalidEntryException shall be thrown if attempted.
2	As a tester I want to group entries together in collection class Entries.
	2.1: A new Entry may only be added if the entry is valid.
	2.2: An Entry shall be able to be removed based on and entryNumber.
	2.3: An Entry shall be able to be found by entryNumber.
3	As a tester I want to create new instance of EntryFrame.
	3.1: The program shall only display selection menus for dollarAmount, type,
	account, an area for a comment, and the submit or cancel buttons if instantiated
	with a null entry.

	3.2: The program shall load the Entry data if instantiated and display all the
	previously selected and entered values for the user to change.
	3.3: The program shall add the Entry when the submit button is pressed only if the
	Entry contains valid information.
4	As a tester I want to be able to conduct file operations after instantiating a
	FileManager.
	4.1: The program shall name a new file Month.txt and it should be located in the
	directory ./Files/YYYY/Month.txt where YYYY is the current numerical year, and
	Month is the current month's name.
	4.2: The program shall be able to print a series of entries onto the file.
	4.3: The program shall be able to read the entries in a file, parse them into Entry
	objects and return an Entries object with all the file Entry objects in it.
5	As a tester I want to be able to translate integers into readable strings using an
	instance of Decoder.
	5.1: The program can take a String read from a file and decode it into a textual
	representation.
	5.2: The program will determine what account was charged and represent it in a
	text version.
	5.3: The program will only take the relevant information from an Entry.
6	As a tester I want to be able to instantiate a DisplayFrame.
	<put a="" here,="" id.="" requirement="" the="" with=""></put>
7	As a user I want to be able to create a new Entry by instantiating EntryFrame and
	store it locally.
	7.1: The program will display an error message when attempting to create a New Entry and the month file has not been created.
	7.2: The program will create a new instance of New Entry.
	7.2. The program will change the if the New Entry frame to match the entry
	number if the Entries list is not empty.
8	As a user I want to be able to edit an instance of Entry stored in Entries by
	instantiating EntryFrame and update it in the storage.
	8.1: The program will ask for an entry number when Edit Entry is clicked. If the
	entry number does not exist a pop-up message will notify the user.
	8.2: The program will ask for an entry number when Edit Entry is clicked. If the
	entry number exists a new instance of Entry Frame will be created and load the
	entry.
	8.3: The program will notify the user using a pop-up message if there is no file.
9	As a user I want to be able to delete an instance of Entry from all storage.
]	9.1: The program will ask for an entry number to delete.
	9.2: The program will search for an Entry by number and if found remove it from
	the Entries collection class and update the file.
	9.3: The program will search for an Entry by number and if not found notify the
	user using a pop-up.
	and a holy also

10	As a user I want to be able to view all instances of Entry stored in the current month's File by instantiating Display Frame.
	<put a="" here,="" id.="" requirement="" the="" with=""></put>
11	As a user I want to be able to view all instances of Entry stored in a selected month's File by instantiating Display Frame.
	<put a="" here,="" id.="" requirement="" the="" with=""></put>
12	As a user I want to be able to delete all data for the current month.
	12.1: The program will remove the current month file if it exists.
	12.2: The program will notify the user using a pop-up if the file does not exist.
	12.3: The program will clear the local Entries array so it does not store the local
	data to the file.
13	As a user I want to be able to create a File for the new month.
	13.1: The program will create a new file for the current month if one does not exist.
	13.2: The program will prompt the user to override the current file if one exists.
	13.3: The program will create the directory if it does not exist.

TEST CASES:

Table 1: Test Case Summary

User Story ID	Requirement ID	Test Case ID	Date	Status Pass/Fail/Pending
1	1.1	1.1	03.28.25	PASS
1	1.2	1.2	03.28.25	PASS
1	1.3	1.3	03.28.25	PASS
2	2.1	2.1	03.28.25	PASS
2	2.2	2.2	03.28.25	PASS
2	2.3	2.3	03.28.25	PASS
3	3.1	3.1	03.28.25	PASS
3	3.2	3.2	03.28.25	PASS
3	3.3	3.3	03.28.25	PASS
4	4.1	4.1	03.31.25	PASS
4	4.2	4.2	03.31.25	PASS
4	4.3	4.3	03.31.25	PASS
5	5.1	5.1	03.31.25	PASS
5	5.2	5.2	03.31.25	PASS
5	5.3	5.3	03.31.25	PASS
7	7.1	7.1	04.01.25	PASS
7	7.2	7.2	04.01.25	PASS

7	7.3	7.3	04.01.25	PASS
8	8.1	8.1	04.01.25	PASS
8	8.2	8.2	04.01.25	PASS
8	8.3	8.3	04.01.25	PASS
9	9.1	9.1	04.01.25	PASS
9	9.2	9.2	04.01.25	PASS
9	9.3	9.3	04.01.25	PASS
12	12.1	12.1	04.01.25	PASS
12	12.2	12.2	04.01.25	PASS
12	12.3	12.3	04.01.25	PASS
13	13.1	13.1	04.01.25	PASS
13	13.2	13.2	04.01.25	PASS
13	13.3	13.3	04.01.25	PASS

Table 2: Test Case Template and Results

Test Case ID: 1.1 Current Status: PASS Date: 03.28.25

Req. ID: 1.1 A new instance can only be created when a valid entryID, entryID>0, is passed in the constructor.

Step#	Operator Action	Expected Results	Comments
1	In Entry Class /*Test Main*/ instantiate a new Entry object and pass it int 0.	Program should throw an InvalidEntryException with message: Invalid Entry Number.	<pre>/*TEST MAIN*/ Run main Debug main Run Debug public static void main(String[] args) { try { Entry testEntry = new Entry(entryNumber:0); System.out.println(testEntry.getEntryString()); } catch (InvalidEntryException e) { System.out.println(e); } }</pre>
2	In Entry Class /*Test Main*/ instantiate a new Entry object and pass it int 1.	Program should print the new entry instance in the format: id,0.0,-1,-1,-1,-1,-1,-1,-1, This format represents an empty entry.	<pre>/*TEST MAIN*/ Run main Debug main Run Debug public static void main(String[] args) { try { Entry testEntry = new Entry(entryNumber:1); System.out.println(testEntry.getEntryString()); } catch (InvalidEntryException e) { System.out.println(e); } }</pre>

Test Case ID: 1.2	Current Status: pending	Date: 03.28.25
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Req. ID: A new instance of Entry shall be initialized by setting all its values to -1 and amount to 0.0.

Step#	Operator Action	Expected Results	Comments
	In Entry Class /*Test	Program should print	<pre>/*TEST MAIN*/ Run main Debug main Run Debug public static void main(String[] args) {</pre>
	Main*/ instantiate a	the new entry instance	try { Entry testEntry = new Entry(entryNumber:1);
	new Entry object and	in the format: id,0.0,-1,-	System.out.println(testEntry.getEntryString()); } catch (InvalidEntryException e) {
1	pass it int > 0.	1,-1,-1,-1,-1,	<pre>System.out.println(e); }</pre>
		This format represents	}
		an empty entry.	

Test Case	Current Status: PASS	Date: 03.28.25
ID: 1.3		

Req. ID: 1.3 The dollar amount, type, category, subcategory1-4, account, attributes shall only be settable to a value greater than 0 after being initialized. An InvalidEntryException shall be thrown if attempted.

St	Operator	Expected Results	Comments
е	Action	•	
р			
#			
1	In Entry Class /*Test Main*/ instantiate a new Entry object and pass it int 1. Use the setter methods to set all parameters to a value greater than 0 or non- empty string.	Program should print the new entry instance in the format: id,dollarAmount,type,category,subcategory,subcategory2,subcategory3,subcategory4,accout,comment	150 /*IESI MATH/* (m man) Debug main [Run] Debug public static void main(Strin 151 try { 152 try { 153 testintry.setabounts 155 testintry.setabounts 157 testintry.setabounts 158 testintry.setabounts 159 testintry.setsbucares 159 testintry.setsbucares 150 testintry.setsbucares 150 testintry.setsbucares 150 testintry.setsbucares 151 testintry.setsbucares 152 testintry.setsbucares 153 testintry.setsbucares 154 testintry.setsbucares 155 testintry.setsbucares 157 testintry.setsbucares 158 testintry.setsbucares 159 testintry.setsbucares 159 testintry.setsbucares 150 testintry.setsbucares 150 testintry.setsbucares 150 testintry.setsbucares 151 testintry.setsbucares 152 testintry.setsbucares 153 testintry.setsbucares 155 testintry.setsbucares 157 testintry.setsbucares
2	In Entry Class /*Test Main*/ instantiate a new Entry object and pass it int 1. Use the setter methods to set all parameters to a value greater than 0 or non- empty string. Using one of the setter	Program should throw and InvalidEntryException and print the corresponding error message. Example: InvalidEntryException: No Category Selected	159

```
methods set a
value of 0 for
any of the
elements.
Example:
testEntry.setC
ategory(0);
```

```
Run main | Debug main | Run | Debug public static void main(String[] args) {
                                                                                                  Run main | Debug main | Run | Debug
public static void main(String[] args) {
                      testEntry.setAmount(amount:12.22);
                                                                                                            testEntry.setAmount(amount:12.22);
                      testEntry.setType(type:2);
                                                                                                            testEntry.setType(type:2);
                      testEntry.setCategory(category:2);
testEntry.setSubcategory(subcategory:1);
                                                                                                            testEntry.setCategory(category:2);
                                                                                                           testEntry.setSubcategory(subcategory:1);
testEntry.setSubcategory2(subcategory2:2);
testEntry.setSubcategory3(subcategory3:1);
                      testEntry.setSubcategory2(subcategory2:2);
                      testEntry.setSubcategory3(subcategory3:1);
                      testEntry.setSubcategory4(subcategory4:3);
                                                                                                            testEntry.setSubcategory4(subcategory4:3);
                      testEntry.setAccount(account:2);
testEntry.setComment(comment:"Test Comment");
                                                                                                           testEntry.setComment(comment:"Test Comment");
                      System.out.println(testEntry.getEntryString());
                                                                                                           testEntry.setCategory(category:0);
                                                                                                       System.out.println(testEntry.getEntryString());
} catch (InvalidEntryException e) {
                      System.out.println(e);
                                                                                                            System.out.println(e);
                                                                                     PROBLEMS 4 OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS
PROBLEMS 4 OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS
```

Test Case ID: 2.1 **Current Status: PASS** Date: 03.28.25 Req. ID: 2.1 A new Entry may only be added if the entry is valid. Valid is not null. Step# **Operator Action Expected Results Comments** TEST MAIN */

mani Debug main [Am | Debug

lic staric void main(string[] args) {

fartice entries - new Entries();

try []

e.settanount(amount:100.0);

e.settatount(amount:100.0);

e.settatount(amount:100.0);

e.settatount(amount:100.0);

e.settatount(amount:100.0);

e.settatount(amount:100.0);

e.settatount(amount:100.0);

e.settatount(amount:10);

e.settatount(account:11);

e.settatocount(account:11);

e.settatount(comment:*This is a commentries.addEntry(e); In Entries Class /*TEST The Entry object e1 MAIN*/ instantiate a should be added to the new Entries object. entries attribute. Instantiate a new Entry 1 object: e1 and set its data. Add e1 to entries. System.out.println(e.getEntryString()); In Entries Class /*TEST The Entry object e1 / TIST PART / A Run main | Debug main | Run | Debug public static void main(String[] args) { Entries entries = new Entries(); Entry e1 = null; entries.addEntry(e1); MAIN*/ instantiate a should be rejected from new Entries object. the entries. 2 Instantiate a new Entry object: e1 and set it equal to null. **Screenshots:**

```
/*TEST MAIN */
Run main | Debug main | Run | Debug
public static void main(String[] args) {

Entries entries = new Entries();

try {

Entry e = new Entry(entryNumber:1);

e.setAmount(amount:100.0);

e.setSubcategory(1);

e.setSubcategory2(subcategory:1);

e.setSubcategory3(subcategory2:1);

e.setSubcategory4(subcategory3:1);

e.setSubcategory4(subcategory4:1);

e.setSubcategory4(subcategory4:1);

e.setSubcategory4(subcategory4:1);

e.setComment(comment:"This is a comment1");

entries.addEntry(e);

prof(Entry e : entries.entries)

{

System.out.println(e.getEntryString());

}

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS

1,100.0,-1,1,1,1,1,1,1,This is a comment1

1,100.0,-1,1,1,1,1,1,1,This is a comment1
```

			t Status: pending	Date: 03.28.25	
	ID: 2.2				
	Req. ID: 2.2 An Entry shall be able to be removed based on and entryNumber.				
St	Opei		Expected Results	Comments	
е	Act	ion			
р #					
1	Class /	N*/ tiate a intries ect. tiate a Entry ct: e1 et its Add e1	Program should print the new entry instance in the format: id,dollarAmount,type,category,subcategory,subcategory2,subcategory3,subcategory4,accout,comment	124 /*IEST NATUR*/ public static void main(String 126 127 128 128 129 129 129 120 120 120 120 120 120 120 120 120 120	
2	Use remov ByNur functi remov entry	the eEntry nber() ion to ve the	Program should print the rest of the entries in the array in this case nothing should be printed.	/*IEST MAIN */ // Man man Debog man Run Debog 225 226 Entrey = new Entre 127 128 Entrey = new Entry(extry) 129 239 240 251 252 260 272 273 273 275 275 276 277 277 278 278 279 279 279 279	
Scr	l eenshots	s:		152	

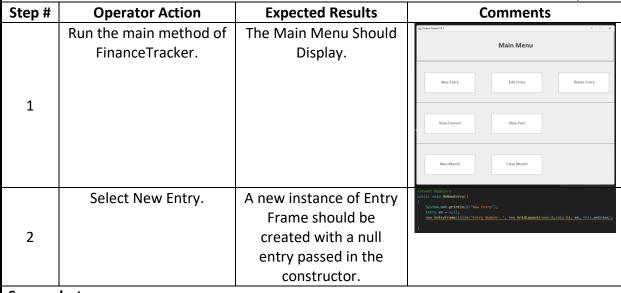
```
/*TEST MAIN */
Run man [Dabug man | Run | Dabug

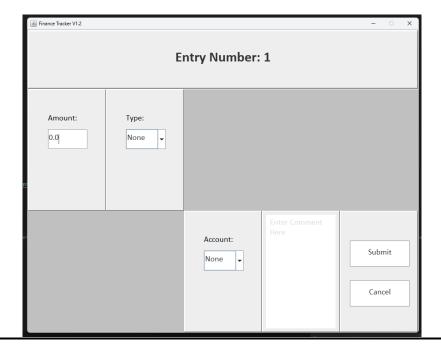
| Dabug man | Run | Dabug
| Dabug man | Run | Dabug
| Dabug man | Run | Dabug
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| Dabug man | Run |
| Dabug man | Run |
```

			ent Status: PASS	Date: 03.28.25			
	ID: 2.3						
Rec	Req. ID: An Entry shall be able to be found by entryNumber.						
St	Opera	ator	Expected Results	Comments			
е	Acti	on					
р							
#				124 /STEET MATH 8/			
	In Ent		Program should print the new entry instance in the	Run main Debug main Run Debug 125 public static void main(String[] 126 Entries entries - new Entrie			
	Cla		format:	127 try { 128 Entry e = new Entry(entryNum 129 e.setAmount(amount:100.0);			
	/*TE		id,dollarAmount,type,category,subcategory,subcategor	130 e.setCategory(category:1); 131 e.setSubcategory(subcategory 132 e.setSubcategory2(subcategory			
	MAII	•	y2,subcategory3,subcategory4,accout,comment	e.setSubcategory3(subcategor e.setSubcategory4(subcategor			
	instan	tiate		e.setAccount(account:1); 136 e.setComment(comment:"This 3 entries.addEntry(e);			
	a ne			138 139 140 Gatch (InvalidEntryExcepti			
	Entries			141 142 for(Entry e : entries.entrie 143 {			
1	object.			144 System.out.println(e.get 145 } 146			
_	Instantiate						
	a ne	ew.					
	Ent	•					
	object	t: e1					
	and se						
	data.	Add					
	e1 t	to					
	entri	es.		(1977)			
	Use		Program should return the entry and print it.	125 Pull 7 125 Pull 7 125 Pull 7 125 Pull 126 Pull Pu			
	getEnt			128 Entry e = new Entry(entrynumber:1); 129 e.setAmount(amount:100.0); 138 e.setCategory(category:1);			
	NmEr	•		e.setSubcategory(subcategory2:1); e.setSubcategory2(subcategory2:1); e.setSubcategory3(subcategory3:1); 134 e.setSubcategory4(subcategory4:1);			
2	funct	_		e.setAccount(account:1); 136 e.setComent(coment:This is a comment 137 entries.addEntry(e); 138			
	wit	:h		139 140 [catch (InvalidEntryException e) (Syst 141 142 Entry find = entries.getEntryByWamEntry()			
	param	eter		142 Entry find = entries.getEntry(s)MmEntry() 143 if(find I= null){System.out.println("Em			
	1.						
Scre	Screenshots:						

Test Case ID: 3.1 Current Status: PASS Date: 03.28.25

Req. ID: 3.1 The program shall only display selection menus for dollarAmount, type, account, an area for a comment, and the submit or cancel buttons if instantiated with a null entry.

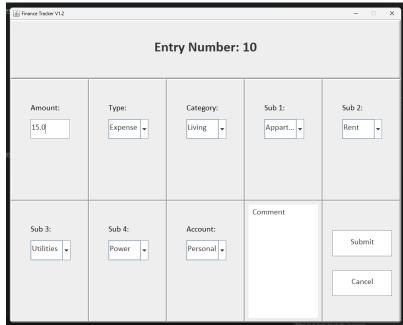




Test Case ID: 3.2 Current Status: Pass Date: 03.28.25

Req. ID: 3.2 The program shall load the Entry data if instantiated and display all the previously selected and entered values for the user to change.

Step#	Operator Action	Expected Results	Comments
	Run the main method of FinanceTracker.	The Main Menu Should Display.	(I) Please Mades (12) - O X
1			New Entry Edit Entry Duleto Entry
_			View Current View Past
			Nerw Moorth Clear Moorth
	Select Edit Entry.	A new instance of Entry Frame should be	<pre>pallc wid Orditarry(); { yesse.out.printin(""dit Entry"); Entry on = null; try(on = nuw Entry(ortynable: 10); on.setAmount(smoott.15.0); en.setPry((you2)); on.setExtpory(classory(2)); }</pre>
2		created with a	en. setSubcategory (Linderategory (1)) en. setSubcategory (Linderategory (1)) en. setSubcategory (Linderategory (1)) en. setSubcategory (2) (Linderategory (2)) en. setSubcategory (2) (Linderategory (2)) en. setSubcategory (1) (Linderategory (2))
2		fabricated entry passed	on.setAccount(secont(s)) on.setAccount(secont(s)) on.setCounce((coment(coment))) on.setCounce((coment(coment))) on.setCounce((coment(coment))) on.setCounce((coment(coment))) on.setCounce((coment)) on.setCounce((come
		in the constructor.)



Test Case ID: 3.3Current Status: pendingDate: 03.28.25

Req. ID: 3.3 The program shall add the Entry when the submit button is pressed only if the Entry contains valid information.

Step #	Operator Action	Expected Results	Comments
1	Run the main method of FinanceTracker.	The Main Menu Should Display.	Main Menu Me
2	Select New Entry.	A new instance of Entry Frame should be created with a null entry passed in the constructor.	Never model and consecutive()
3	Click Submit	An Error message should appear, invalid amount.	Entry Number: 3 Entry Number: 3 Amount: Type: None Account: None Account: None Cancel
4	Enter Amount > 0 and click Submit.	An Error message should appear, invalid type.	Entry Number: 3 Entry Number: 3 Annount: 12 None ** ** ** ** ** ** ** ** ** ** ** ** *

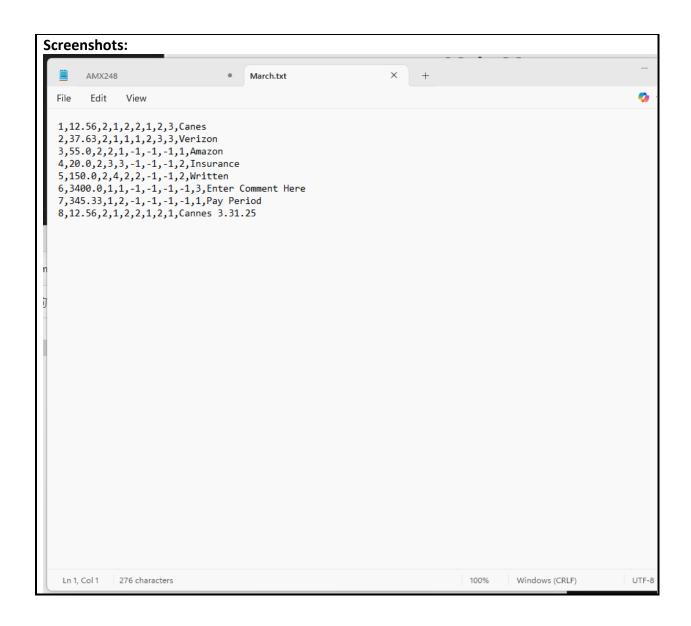
5	Select type expense and click submit.	An Error message should appear, invalid category.	Entry Number: 3 Entry Number: 3 Annount:
6	Select category personal and click submit.	An Error message should appear, no account selected.	Entry Number: 3 Entry Number: 3 Amount: Type: Category: Sub 1: Poor Poor Poor Poor Poor Poor Poor Poo
7 Screens	Select Account personal and click submit.	The frame should close and return to the main menu.	
Screens	mots:		

Req. ID: 4.1 The program shall name a new file Month.txt and it should be located in the directory ./Files/YYYY/Month.txt where YYYY is the current numerical year, and Month is the current month's name.

		ere YYYY is the current numer	rical year, and Month is the
	month's name.		
Step#	Operator Action	Expected Results	Comments
1	In the FileManager class's /*TEST MAIN*/ create a new instance of FileManager.	A new instance shall be created.	FileManager fm = new FileManager();
2	Using the makeDir and makeFile functions create a directory and file with the required name and location.	A new Directory shall be created named after the numerical year and inside of it contains a text file named after the current month.	LOCATION: ./Files/YYYY/Month.txt Example: ./Files/2025.March.txt 202
Screens	nots:		
2025	× +		
\leftarrow \rightarrow	↑ C 🖵 > ··· Programming	> Java > FinanceTrackerV2-Sprint-2 >	Files > 2025 Search 2025
+ New ×		General Digital Signatures Security Details Pre	
↑ Home ✓ Gallery	Name March	March March	
	—	Type of file: Text Document (.txt)	
Deskto	p *		Change
<u>↓</u> Downl		Location: mming \Java\FinanceTracker\V2-Spr	int-2\Files\20\25
	ents 🖈	Size on disk: 0 bytes	
Picture		Created: Monday, March 31, 2025, 6:54:39 P	M
Music Video	*	Modified: Monday, March 31, 2025, 6:57:37 P	
☑ Videos ☐ Comm	* unity *	Accessed: Today, March 31, 2025, 2 hours ago	
Comm	unity #	Attributes: Read-only Hidden	Advanced
= Java	eTracker\		
== Tests			
Progra	mming	OK (Cancel Apply

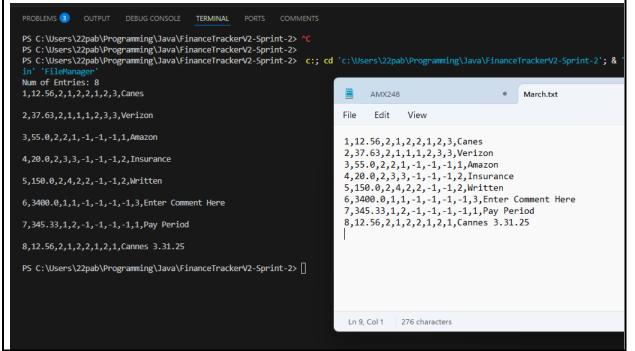
1 item 1 item selected 246 bytes

Test Cas	Test Case ID: 4.2		Date: 03.31.25		
Req. ID:	Req. ID: 4.2 The program shall be able to print a series of entries onto the file.				
Step#	Operator Action	Expected Results	Comments		
1	Run the main funciton in FinanceTracker.java.	A new main menu frame should be visible.	Main Menu New Entry Edit Entry Delete Entry View Past New Month Clear Month		
2	Select New Entry.	A new empty entry Frame should be visible.	Entry Number: 8 Amount: Type: Number: Account: None - Substitute Comment Substitute Comm		
3	Fill out a new Entry with valid data and Click Submit.	A new Entry object should be created and added to the Entries ArrayList.	Valid data includes: amount > 0, type selected, category selected, a selection made for any subcategories that are visible, an account selected, a comment entered. Entry Number: 8 Amount: Type: Category: Sub 1: Youd		
4	Using File Explorer or equivalent, navigate to ./Files/2025/March.txt	Any Entry objects stored in the Entries object ArrayList should be	The numbers represent the selected index from the respective		
		printed in a semi-encoded string inside the file.	JComboBox.		



Req. ID: 4.3 The program shall be able to read the entries in a file, parse them into Entry objects and return an Entries object with all the file Entry objects in it.

Step#	Operator Action	Expected Results	Comments
1	In the FileManager /*TEST MAIN*/ function: Create a new instance of File Manager.	A new instance of FileManager shoud be created.	
2	Create an new instance of Entries and utilize the readEntries function in combination with the FILE PATH functions to read from the file created int the previous test case 4.2.	All the entries stored in the file should be read into the the Entries object.	
3	Create a new instance of ArraList <entry> and initialize it with the value if the Entries object array list using the getEntries method. Iterate through the entries and print them to the console.</entry>	All the entries stored in the file should be printed onto the console.	## INTERNATION



Test Case ID: 5.1	Current Status: PASS	Date: 03.31.25
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Req. ID: 5.1 The program can take a String read from a file and decode it into a textual representation.

Step#	Operator Action	Expected Results	Comments
	Using the /*TEST MAIN*/	New null instance of	
	found in	decoder is created.	
1	FileManager.java, create		
	a new instance of		
	Decoder.		
	Inside the for loop:	The current entry	
	initialize the new	being read from the	
2	Decoder with the string	file, will be passed into	
	of the current entry	Decoder.	
	being read.		
	Us the getDecoded	The console should	PEST MAIN = PEST MAIN =
	Method to print out the	display the decoded	<pre>Decoder d; System.cout.printle("Non of Entries: "+ facgetNamberOffentries(facgetFileDath(facmonth, facyone))); System.cout.printle();</pre>
3	decoded equivalent of	user selected data	iii Entries entries - fm.readistries(fm.getfilefath(fm.getCurrentMonth(), fm.getCurrentYear())); Arra(ListEntry) ent - antries.getEntries();
	the data.	from the entry.	<pre>interface 1 = eq.2 = ent.nls(); 1 = eq.</pre>

```
PROBLEMS 3 OUTPUT
                     DEBUG CONSOLE TERMINAL
PS C:\Users\22pab\Programming\Java\FinanceTrackerV2-Sprint-2> ^{\mbox{C}}
PS C:\Users\22pab\Programming\Java\FinanceTrackerV2-Sprint-2>
PS C:\Users\22pab\Programming\Java\FinanceTrackerV2-Sprint-2> c:; cd 'c:\Users\22pab
Num of Entries: 8
RAW ENTRY: 1,12.56,2,1,2,2,1,2,3,Canes
Decoded Data: Expense Living Food Food Out Eat Out Restaurant
RAW ENTRY: 2,37.63,2,1,1,1,2,3,3,Verizon
Decoded Data: Expense Living Appartment Rent Utilities Cell
RAW ENTRY: 3,55.0,2,2,1,-1,-1,-1,1,Amazon
Decoded Data: Expense Purchase Personal
RAW ENTRY: 4,20.0,2,3,3,-1,-1,-1,2,Insurance
Decoded Data: Expense Flight Fun
RAW ENTRY: 5,150.0,2,4,2,2,-1,-1,2,Written
Decoded Data: Expense School Flight Training Exam
RAW ENTRY: 6,3400.0,1,1,-1,-1,-1,3,Enter Comment Here
Decoded Data: Income Mother
RAW ENTRY: 7,345.33,1,2,-1,-1,-1,1,Pay Period
Decoded Data: Income Pay Stub
RAW ENTRY: 8,12.56,2,1,2,2,1,2,1,Cannes 3.31.25
Decoded Data: Expense Living Food Food Out Eat Out Restaurant
PS C:\Users\22pab\Programming\Java\FinanceTrackerV2-Sprint-2>
```

Test Case ID: 5.2	Current Status: PASS	Date: 03.31.25				
Req. ID: 5.2 The program will determine what account was charged and represent it in a text						
version.						

Step#	Operator Action	Expected Results	Comments
	Using the /*TEST MAIN*/	New null instance of	
	found in	decoder is created.	
1	FileManager.java, create		
	a new instance of		
	Decoder.		
	Inside the for loop:	The current entry	
	initialize the new	being read from the	
2	Decoder with the string	file, will be passed into	
	of the current entry	Decoder.	
	being read.		
	Use the decodeAccount	The console should	7 TEXT SOLD 7 TEXT SOL
	method in the while loop	print what account the	December () 107 108 System contraction from of Sotries: "+ fm.getnumberoffentries(fm.getf)loreth(fm.month, fm.year))); 108 System contraction () 109 System contraction ()
3	to print out what account	entries were charged	<pre>cccccccccccccccccccccccccccccccccccc</pre>
	the entry was charged to.	to.	Community printle("Non Uniter "ment per(1) perintry/pering()); d = non Decoder(est, per(1), perintry/pering()); Districts Printle("Non Uniter "ment per(1) perintry("); System.or. printle("Company to: "vid.decodel():" Account."); System.or. printle("Company to: "vid.decodel(community" Account."); System.or. printle(); System.

PROBLEMS 3 OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENT:

Charged to: Mother Account.

RAW ENTRY: 2,37.63,2,1,1,1,2,3,3,Verizon

Decoded Data: Expense Living Appartment Rent Utilities Cell

Charged to: Mother Account.

RAW ENTRY: 3,55.0,2,2,1,-1,-1,-1,1,Amazon Decoded Data: Expense Purchase Personal

Charged to: Personal Account.

RAW ENTRY: 4,20.0,2,3,3,-1,-1,-1,2,Insurance

Decoded Data: Expense Flight Fun Charged to: Flight Account.

RAW ENTRY: 5,150.0,2,4,2,2,-1,-1,2,Written

Decoded Data: Expense School Flight Training Exam

Charged to: Flight Account.

RAW ENTRY: 6,3400.0,1,1,-1,-1,-1,3,Enter Comment Here

Decoded Data: Income Mother Charged to: Mother Account.

RAW ENTRY: 7,345.33,1,2,-1,-1,-1,1,Pay Period

Decoded Data: Income Pay Stub Charged to: Personal Account.

RAW ENTRY: 8,12.56,2,1,2,2,1,2,1,Cannes 3.31.25

Decoded Data: Expense Living Food Food Out Eat Out Restaurant

Charged to: Personal Account.

PS C:\Users\22pab\Programming\Java\FinanceTrackerV2-Sprint-2> [

Test Case ID: 5.3 Current Status: PASS Date: 03.31.25

Req. ID: 5.3 The program will only take the relevant information from an Entry.

Step#	Operator Action	Expected Results	Comments
1	Run the /* Test Main*/ funciton in FileManager.java	A series of entries should be printed to the console.	Charged to: Mother Account. RAW EMIRY: 2,37.63,2,1,1,1,2,3,3,Verizon Decoded Data: Expense Living Appartment Rent Utilities Cell Charged to: Mother Account. RAW EMIRY: 3,55.0,2,2,1,-1,-1,-1,1,Amazon Decoded Data: Expense Furchase Personal Charged to: Personal Account. RAW EMIRY: 3,55.0,2,3,3,-1,-1,-1,2,Insurance Decoded Data: Expense Fight fun Charged to: Flight Account. RAW EMIRY: 4,20,0,2,3,3,-1,-1,-1,2,Insurance Decoded Data: Expense Fight fun Charged to: Flight Account. RAW EMIRY: 5,150,0,2,4,2,2,-1,-1,2,Mritten Decoded Data: Expense School Flight Training Exam Charged to: Flight Account. RAW EMIRY: 3,450,0,1,1,-1,-1,-1,-1,3,Enter Comment Here Decoded Data: Income Nother Charged to: Mother Account. RAW EMIRY: 3,453,0,1,2,-1,-1,-1,-1,1,Pay Period Decoded Data: Tomose Poy Stub Charged to: Personal Account. RAW EMIRY: 3,256,2,1,2,2,1,2,1,1, Cannes 3,31.25 Decoded Data: Expense Living Food Food Out Eat Out Restaurant Charged to: Personal Account. PS C: Users\(\)\(\)\(\) Deprivation (2) Personal Account. PS C: Users\(\)\(\)\(\) Deprivation (2) Personal Account. PS C: Users\(\)\(\)\(\)\(\) Personal Account. PS C: Users\(\)\(\)\(\)\(\)\(\) Personal Account. PS C: Users\(\)\(\)\(\) Personal Account. PS C: Users\(\)\(\)\(\)\(\)\(\)\(\)\(\)\(\
2	Verify printed values are those that are relevant.	When the relevant information is printed, the data from Type to SubCat4 should be converted into text form if not a -1. If a -1 is encountered nothing should be printed for that value.	The format of a Raw Entry is as follows: Entry Number, Ammount, Type, Category, SubCat1, SubCat2, SubCat3, SubCat4, Account, Comment If a piece of data is not relevant, it should be marked by a -1.

Charged to: Mother Account.

RAW ENTRY: 2,37.63,2,1,1,1,2,3,3,Verizon
Decoded Data: Expense Living Appartment Rent Utilities Cell
Charged to: Mother Account.

RAW ENTRY: 3,55.0,2,2,1,-1,-1,-1,1,Amazon
Decoded Data: Expense Purchase Personal
Charged to: Personal Account.

RAW ENTRY: 4,20.0,2,3,3,-1,-1,-1,2,Insurance
Decoded Data: Expense Flight Fun
Charged to: Flight Account.

RAW ENTRY: 5,150.0,2,4,2,2,-1,-1,2,Written
Decoded Data: Expense School Flight Training Exam
Charged to: Flight Account.

RAW ENTRY: 6,3400.0,1,1,-1,-1,-1,-1,3,Enter Comment Here
Decoded Data: Income Mother
Charged to: Mother Account.

RAW ENTRY: 7,345.33,1,2,-1,-1,-1,-1,1,Pay Period
Decoded Data: Income Pay Stub
Charged to: Personal Account.

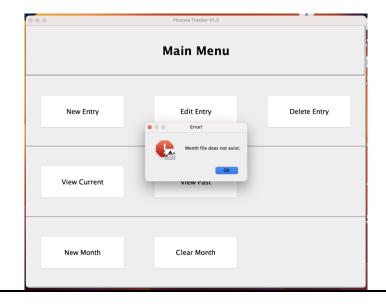
RAW ENTRY: 8,12.56,2,1,2,2,1,2,1,Cannes 3.31.25
Decoded Data: Expense Living Food Food Out Eat Out Restaurant
Charged to: Personal Account.

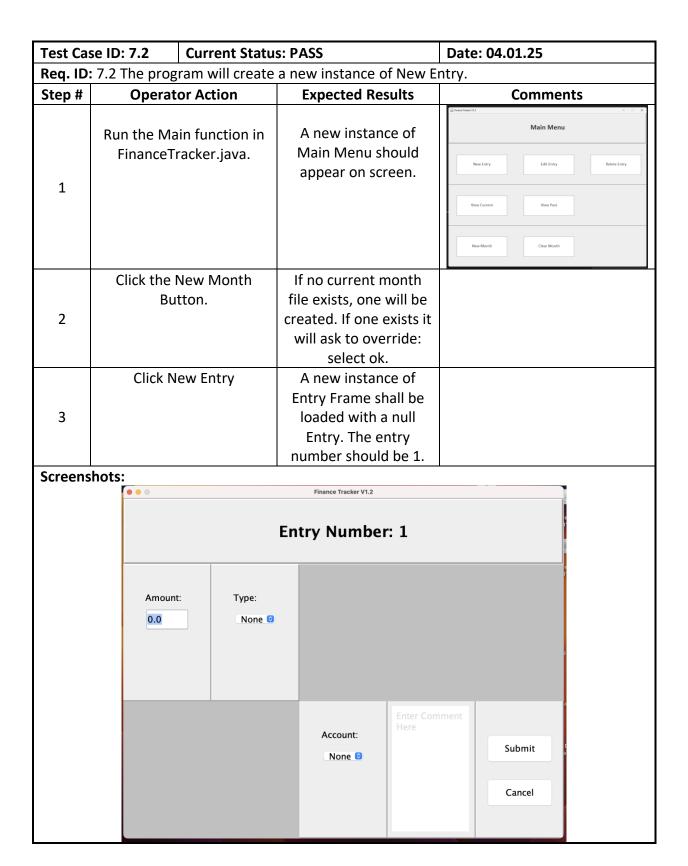
PS C:\Users\22pab\Programming\Java\FinanceTrackerV2-Sprint-2> []

Test Case ID: 7.1 Current Status: PASS Date: 04.01.25

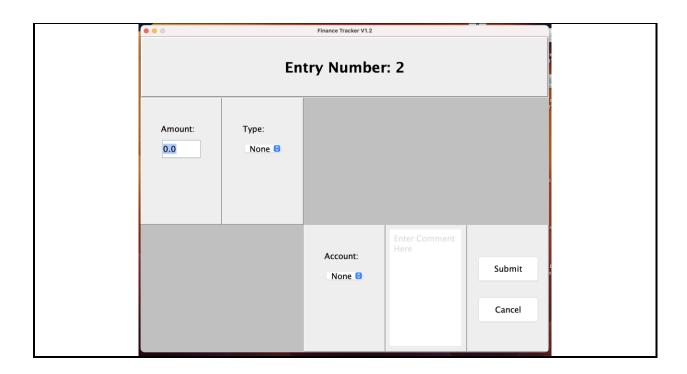
Req. ID: 7.1 The program will display an error message when attempting to create a New Entry and the month file has not been created.

Step#	Operator Action	Expected Results	Comments
1	Run the Main function in FinanceTracker.java.	A new instance of Main Menu should appear on screen.	Main Menu New Entry Edit Entry Usew Past New Month Clear Month
2	Click the Clear Month button.	If a current month file exists, it will be removed from the computer.	
3	Click the New Entry button.	The application should create a pop-up window stating that there is no current month file.	





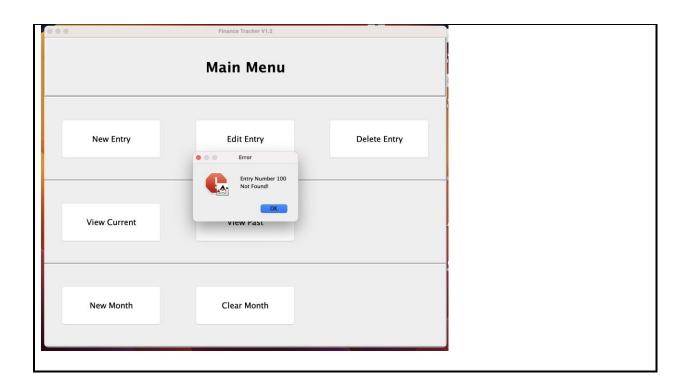
Req. ID: Step #	Operato	or Action	Expected Results	T
Step#		or Action	Expected Posults	
	Run the Ma		Expected Results	Comments
1		in function in racker.java.	A new instance of Main Menu should appear on screen.	Main Menu
2		New Month tton.	If no current month file exists, one will be created. If one exists it will ask to override: select ok.	
3	Click No	ew Entry	A new instance of Entry Frame shall be loaded with a null Entry. The entry number should be 1.	
4	Enter a v	alid entry.	The entry should be added to the Entries collection class and printed to the current month file.	If the entry number reads something other than 1, it is likely there are already entries in the file. Skip this step if that is true.
5 Screensh		ew Entry	A new instance of Entry Frame shall be created with a null Entry. The entry number should be sequential to the previous entry.	



Test Case ID: 8.1 Current Status: PASS Date: 04.01.25

Req. ID: 8.1 The program will ask for an entry number when Edit Entry is clicked. If the entry number does not exist a pop-up message will notify the user.

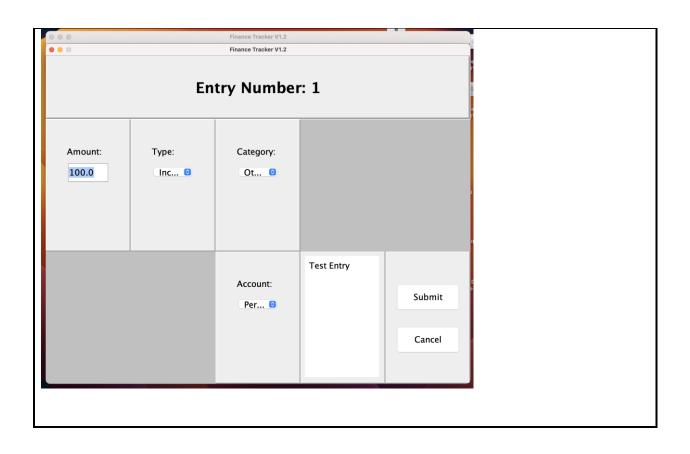
number does not exist a pop-up message will notify the user.			
Step#	Operator Action	Expected Results	Comments
1	Run the Main function in FinanceTracker.java.	A new instance of Main Menu should open.	Main Menu New Entry Edit Entry Delete Entry View Past New Month Clear Month
2	Select Edit Entry.	A pop-up should appear asking for an entry number.	Main Menu New Entry Edit Entry Delete Entry View Current View Current New Month Clear Month
3	Enter 100	A pop-up should appear stating entry number 100 was not found.	This assumes there is less than 100 entries in the current file.
Screenshots:			



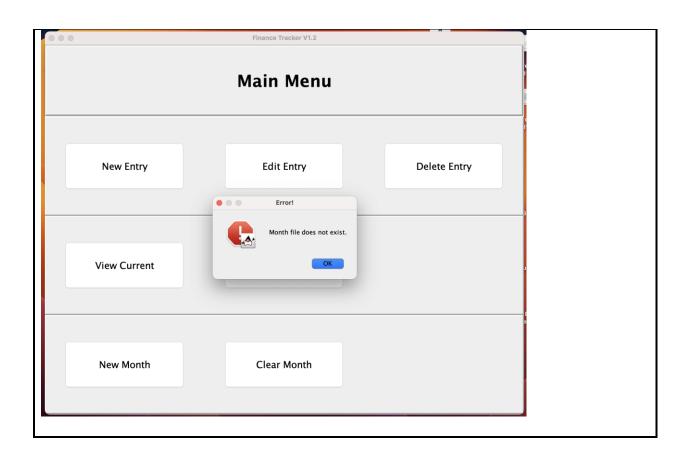
Test Case ID: 8.2 Current Status: PASS Date: 04.01.25

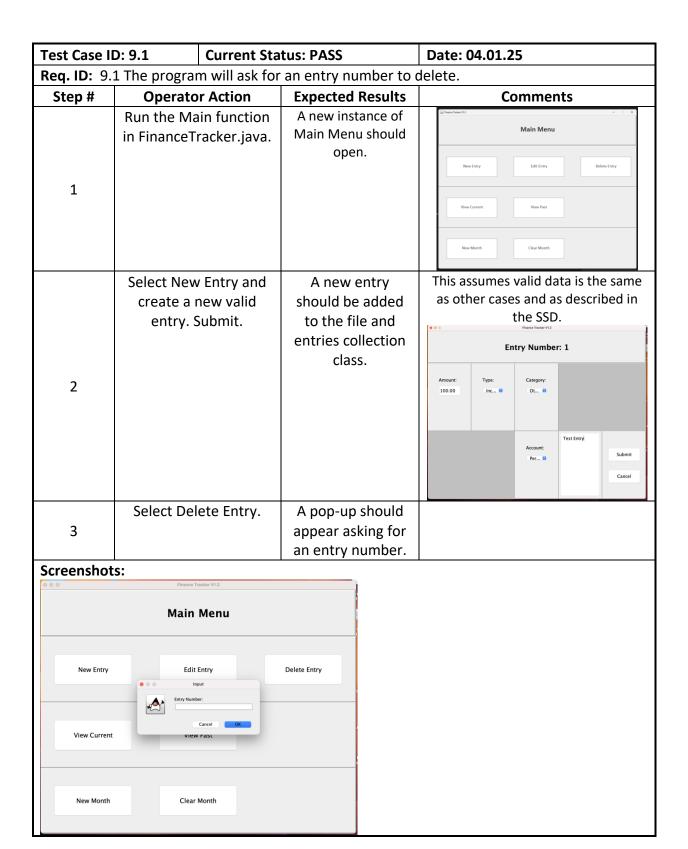
Req. ID: 8.2 The program will ask for an entry number when Edit Entry is clicked. If the entry number exists a new instance of Entry Frame will be created and load the entry.

Run the Main function in FinanceTracker.java. Select New Entry and create a new valid entry. Submit. Select Edit Entry. A pop-up should appear asking for an entry number. Select Edit Entry created in step 2. A new instance of Main Menu should open. A new entry should be added to the file and entries collection class. This assumes valid data is the same as other cases and as described in the SSD. Entry Number: 1 A pop-up should appear asking for an entry number. A new instance of Entry Frame should be created and the selected Entry should be loaded into the	Step#	Operator Action	Expected Results	Comments
Select Edit Entry. A pop-up should appear asking for an entry number. Select the number of the entry created in step 2. A new instance of Entry Frame should be created and the selected Entry should be Enter the number of the entry created in step 2. A new instance of Entry Frame should be created and the selected Entry should be		Run the Main function	A new instance of Main Menu should	di frees Nates VII = 1 X Main Menu New Entry Edit Entry Ulew Carrent View Past
appear asking for an entry number. Enter the number of the entry created in step 2. A new instance of Entry Frame should be created and the selected Entry should be	2	create a new valid	should be added to the file and entries collection	as other cases and as described in the SSD. France Product YLE Entry Number: 1 Amount: Type: Category: Ot
the entry created in step 2. Entry Frame should be created and the selected Entry should be	3	Select Edit Entry.	appear asking for	New Entry Edit Entry Delete Entry Special Delete Entry Special Specia
selections.		the entry created in step 2.	Entry Frame should be created and the selected Entry should be loaded into the	Main Menu New Gony Gels Early Oncion Early Vier Correct New Worth Chart North
Community	Screenshot	is:	<u> </u>	



Test Cas	se ID: 8.3	Current Statu	s: PASS	Date: 04.01.25
Req. ID:	8.3			
Step#	Operat	or Action	Expected Results	Comments
		in function in racker.java.	A new instance of Main Menu should open.	(d) (News Telesco TOL) Main Menu New Fotory Edit Fotory Delete Fotory
1				View Past View Past
	Select Clea	r Month and	The current file should	New Month Clear Month
2	con	firm.	be removed from the users computer.	
3	Select E	Edit Entry	A pop-up should appear stating there is	
			no current month file.	
Screens	hots:			





Test Case ID: 9.2 Current Status: PASS Date: 04.01.25

Req. ID: 9.2 The program will search for an Entry by number and if found remove it from the Entries collection class and update the file.

Entries coll	ection class and update th	e file.	
Step#	Operator Action	Expected Results	Comments
1	Run the Main function in FinanceTracker.java.	A new instance of Main Menu should open.	Main Menu New Entry Edit Entry Delete Entry
2	Select New Entry and create a new valid entry. Submit.	A new entry should be added to the file and entries collection class.	This assumes valid data is the same as other cases and as described in the SSD. Final Park Walder VI.2 Entry Number: 1 Amount: Type: Category: Ot. 8 Account: Per. 8 Test Entry Cancel
3	Select Delete Entry.	A pop-up should appear asking for an entry number.	Main Menu New Corey Self Corey Defen Corey Wee Corruer New North Clar North
4	Enter 1.	The Entry should be removed from the text file and collection class.	
Screenshot	ss:		

Test Case ID: 9.3 Current Status: PASS Date: 04.01.25

Req. ID: 9.3 The program will search for an Entry by number and if not found notify the user using a pop-up.

Step#	Operator Action	Expected Results	Comments
1	Run the Main function in FinanceTracker.java.	A new instance of Main Menu should open.	Main Menu Menu Entry Galt Entry Delete Entry View Past New Month Clear Month
2	Select New Entry and create a new valid entry. Submit.	A new entry should be added to the file and entries collection class.	This assumes valid data is the same as other cases and as described in the SSD. Finance Planter VLS Entry Number: 1 Amount: Type: Category: Ot 8 Account: Per 8 Test Entry Submit Cancel
3	Select Delete Entry.	A pop-up should appear asking for an entry number.	Main Menu Non Cory List tory L
4	Enter 100.	A pop-up should appear stating entry number 100 was not found.	This assumes the current file has less than 100 entries.

Screenshots:



Test Case	ID: 10.1	Current Status: Pending		Date:	
Req. ID: 1	L0.1				
Step#	Operator Action		Expected Results	Comments	
1					
2					
N					

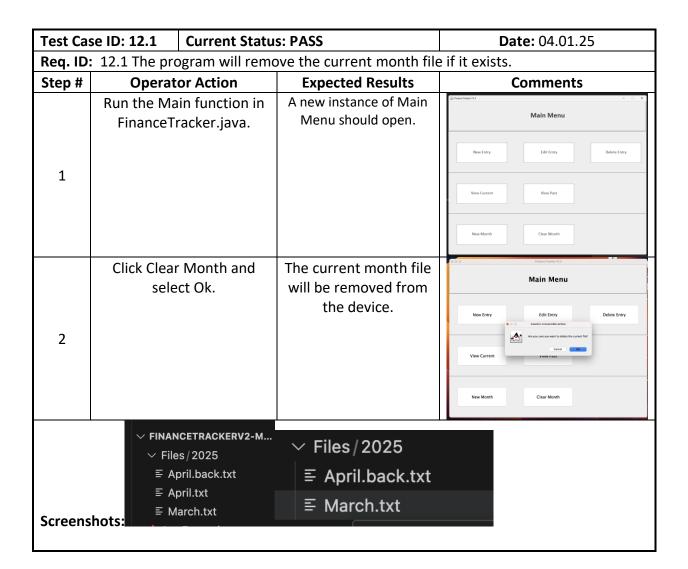
Test Case	ID: 10.2 Current Status: Pending		: Pending	Date:	
Req. ID: 1	0.2				
Step#	Operator Action		Expected Results	Comments	
1					
2					
N					

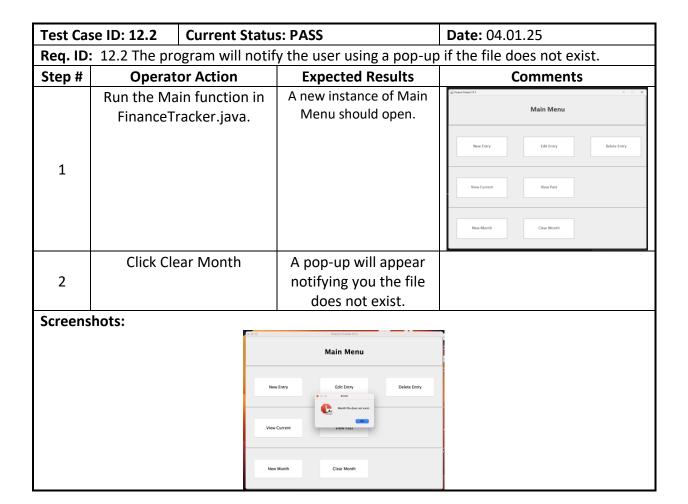
Test Case	e ID: 10.3	Current Status: Pending		Date:	
Req. ID:	D: 10.3				
Step#	Operator Action		Expected Results	Comments	
1					
2					
N					
Screensh	ots:				

Test Cas	e ID: 11.1	Current Status: Pending		Date:
Req. ID:	11.1			
Step#	Operator Action		Expected Results	Comments
1				
2				
N				
Screensl	nots:			

Test Cas	e ID: 11.2	Current Status: Pending		Date:	
Req. ID:	11.2				
Step#	Operator Action		Expected Results	Comments	
1					
2					
N					
Screensh	nots:				

Test Case	e ID: 11.3 Current Status		: Pending	Date:	
Req. ID: 1	1.3				
Step#	Opera	tor Action	Expected Results	Comments	
1					
2					
N					



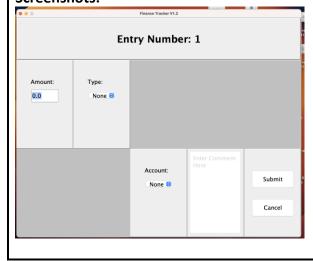


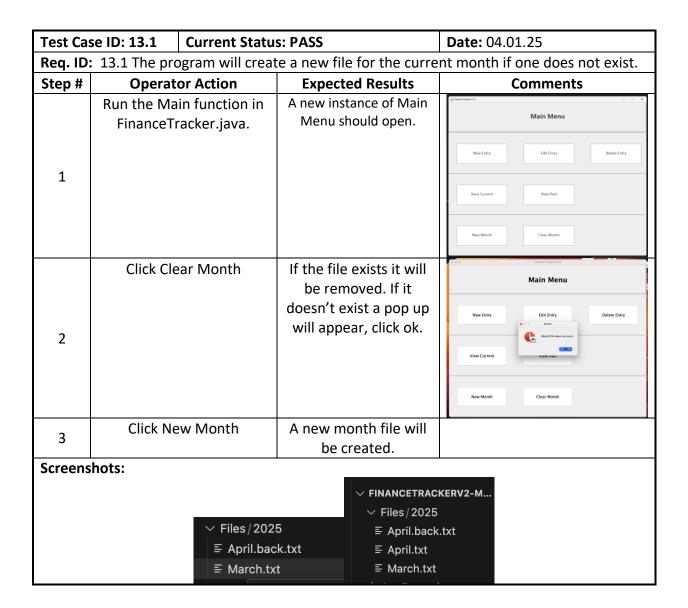
Test Case ID: 12.3 Current Status: PASS Date: 04.01.25

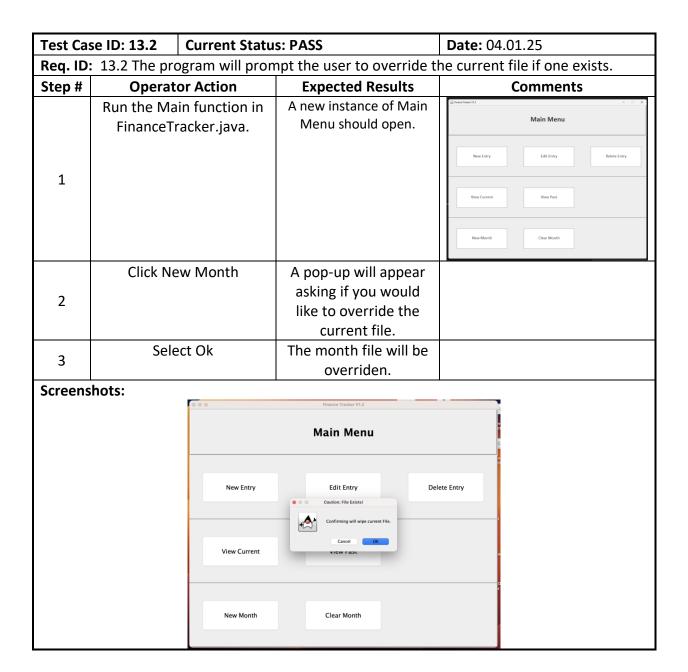
Req. ID: 12.3 The program will clear the local Entries array so it does not store the local data to the file.

Step#	Operator Action	Expected Results	Comments
1	Run the Main function in FinanceTracker.java.	A new instance of Main Menu should open.	Main Menu New Entry Edit Entry Usew Past New Month Clear Month
2	Click clear month.	If the file exists it will be removed. If it doesn't exist a pop up will appear, click ok.	Main Menu New Entry Edit Entry Delete Entry View Current View Current View Month Clear Month
3	Click New Month	A new month file will be created.	
4	Click New Entry	A new instance of Entry Frame should be created with a null entry and entry number 1.	If the entry number is 1 it means the array list has been properly cleared.

Screenshots:







Test Cas	se ID: 13.3	Current Statu	s: PASS	Date: 04.01.25
Req. ID:	13.3 The pro	ogram will creat	te the directory if it does	not exist.
Step#	Operat	or Action	Expected Results	Comments
1		in function in racker.java.	A new instance of Main Menu should open.	Main Menu New Entry Edit Entry Oeleta Entry View Past New Month Clear Month
2		iles Directory cation folder.	No directory will exist.	✓ FINA [↑ E↑ D □ J AppFrame.java CS225_P4/C225/Pro CS225_P4Run lava Pro CS225_P4Run lava Pro CS225_P4Run lava Pro J Decoder.java J DisplayFrame.java J Entryiava J Entryiava J FileFormatException J FileManager.java J InvalidEntryExceptio J LayoutMismatchExc J MenuFrame.java ≡ UML(4_01_2025)UP
3	Click Ne	w Month.	The Files/20XX/ directory will be created depending on the current year.	
EXPLORER EXPLORER FINA [*, E*, F*, F*, F*, F*, F*, F*, F*, F*, F*, F	ava ATS_Ba ATS_Ba SDD_Ba a ae.java ijava xxxxeption java ker.java txxxpivo java			

References:
Oracle. (n.d.). Trail: Creating a GUI with swing. Trail: Creating a GUI With Swing (The
JavaTM Tutorials). https://docs.oracle.com/javase/tutorial/uiswing/index.html

APPENDICES: