

Project Summary

Sales files are received for different franchises. These sales files vary in format, with either static locations for needed information (tender type, sales total, etc.), or requiring parsing based on key words. The end goal is to be able to process a given date range worth of sales for various locations and produce a file with specific formatting that can be accepted by the accounting software.

For example, there are two existing franchises, Franchise A and Franchise B. Franchise A has 3 locations, with minor differences in the sales files. Franchise B only has one location. The configuration will be stored in the database, so when it is said to import sales for the week ending 2/22, no further user input will be necessary and the desired import files will be produced, one for each location.

Project Requirements

Req. ID	Requirement Description
R.01	Users shall be able to specify a date range and location and receive a single Peachtree formatted import file.
R.02	User shall be able to specify a group of locations and a date range, and receive a Peachtree formatted import file of sales for each location.
R.03	System will handle a wide range of sales files, as long as the format is known ahead of time.
R.04	System must produce valid Peachtree import files.
R.05	System must log errors such as missing sales file, missing deposit information (the day's journal entry does not add up correctly), outrageous over/shorts

Users and Tasks

This system will have one type of user, specifically an administrator. Users will need to be able to generate import files and receive information if the generation fails.

Use Case ID:	UC.01																	
Use Case Name:	Location - process day of sales																	
Description:	User can generate an import file for Peachtree from a provided sales file																	
Actors:	Administrator																	
Pre-conditions:	Sales file exists in predetermined location & with a format that the system has been configured to accept.																	
Post-condition	A Peachtree import file is generated, any errors are logged																	
Main Scenario	<table><tr><th></th><th>Actor Action</th><th>System Response</th></tr><tr><td>1</td><td>Specify location and date</td><td>Loads correct parsing mechanism based on location</td></tr><tr><td>2</td><td></td><td>Parses sales file</td></tr><tr><td>3</td><td></td><td>Generate import file</td></tr><tr><td>4</td><td>Acquire import file</td><td></td></tr></table>				Actor Action	System Response	1	Specify location and date	Loads correct parsing mechanism based on location	2		Parses sales file	3		Generate import file	4	Acquire import file	
	Actor Action	System Response																
1	Specify location and date	Loads correct parsing mechanism based on location																
2		Parses sales file																
3		Generate import file																
4	Acquire import file																	
Exception Scenario	1a. Location not configured 1b. Exit																	
Exception Scenario	2a. Sales file doesn't exist 2b. Generate empty sales import for the day, log error																	
Exception Scenario	3a. Import file doesn't add up (missing lines, unexpected format, any number of things) 3b. Generate partial file if possible, log error																	

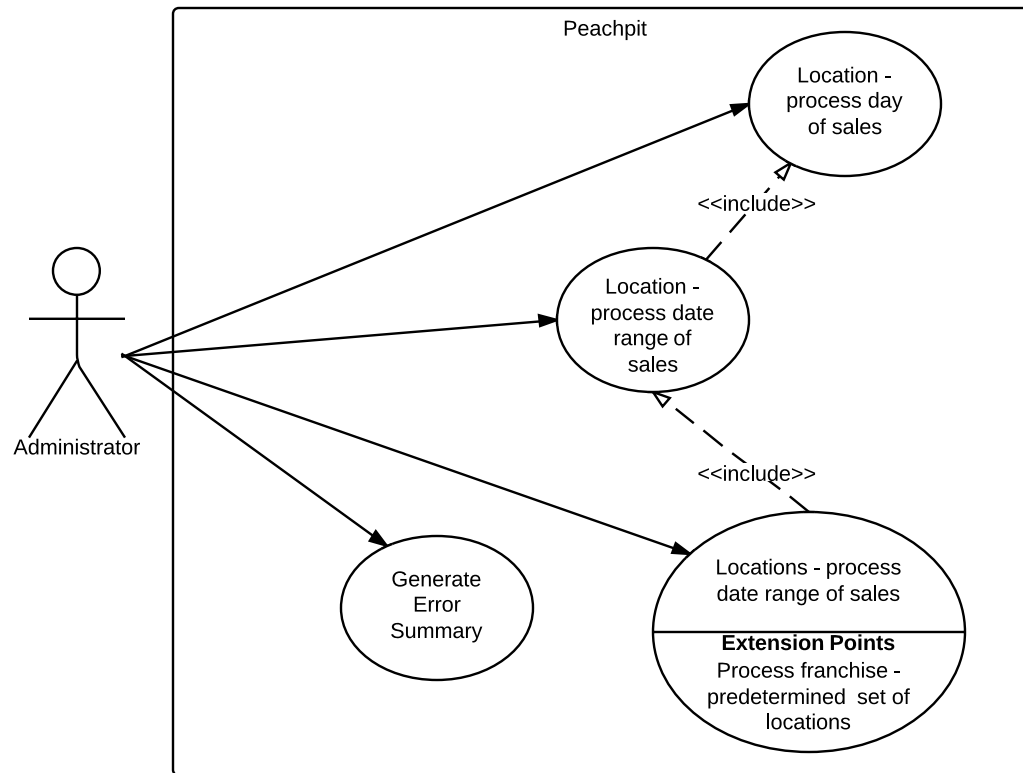
Use Case ID:	UC.02		
Use Case Name:	Location - process date range of sales		
Description:	User can generate an import file for Peachtree from a provided sales file (all days are in same file)		
Includes:	UC.01		
Actors:	Administrator		
Pre-conditions:	Sales file exists in predetermined location & with a format that the system has been configured to accept.		
Post-condition	A Peachtree import file is generated, any errors are logged		
Main Scenario			
		Actor Action	System Response
	1	Specify location and date	UC.01 on each day in range
Exception Scenario	Same as UC.01		

Use Case ID:	UC.03
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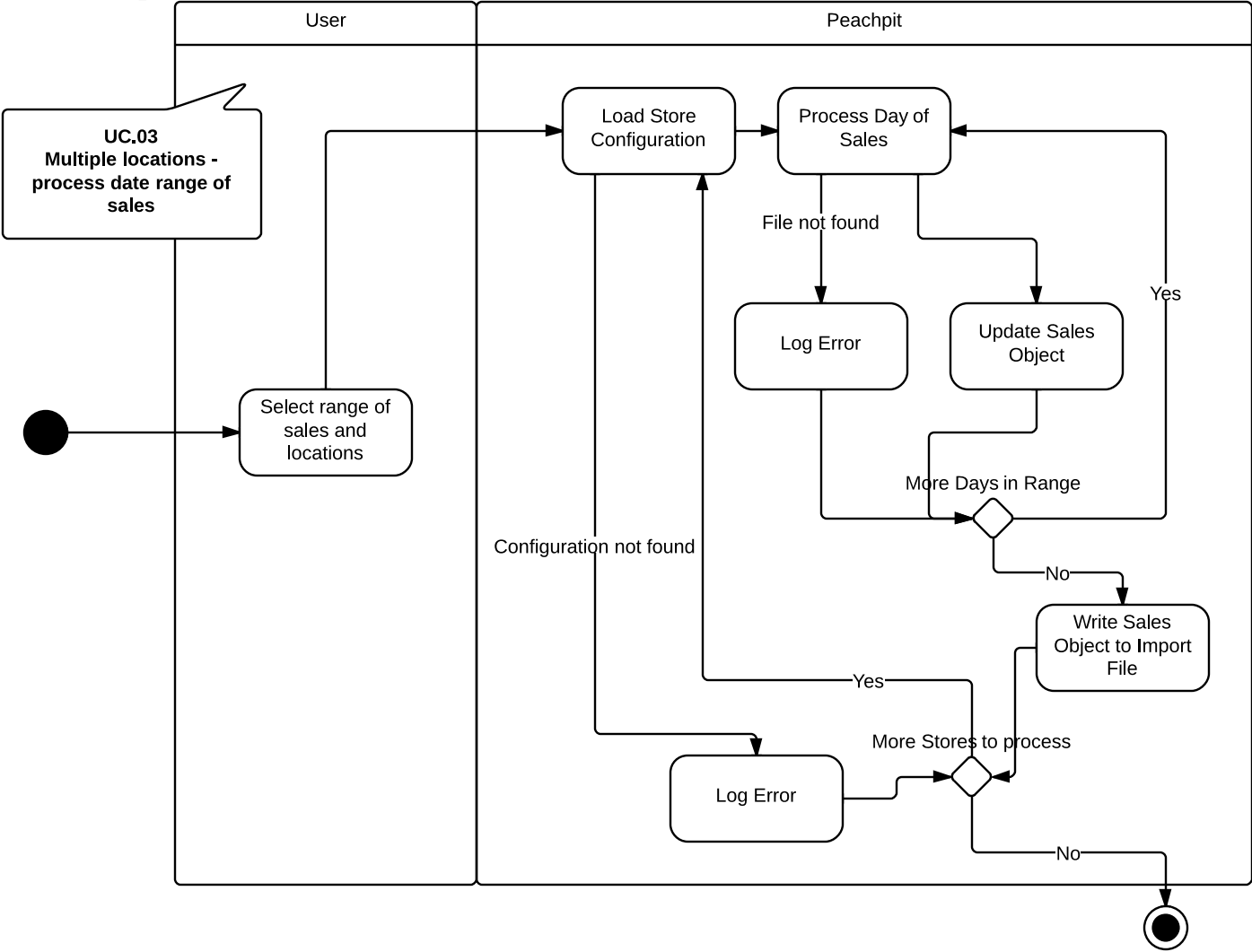
Use Case Name:	Multiple locations - process date range of sales							
Description:	User can generate an import file for Peachtree from a provided sales file (one for each location)							
Includes:	UC.01, UC.02							
Actors:	Administrator							
Pre-conditions:	Sales file exists in predetermined location & with a format that the system has been configured to accept.							
Post-condition	A Peachtree import file is generated, any errors are logged							
Main Scenario	<table> <tr> <th></th><th>Actor Action</th><th>System Response</th></tr> <tr> <td>1</td><td>Specify locations and date</td><td>UC.02 on each location</td></tr> </table>			Actor Action	System Response	1	Specify locations and date	UC.02 on each location
	Actor Action	System Response						
1	Specify locations and date	UC.02 on each location						
Exception Scenario	Same as UC.02							
Extension	Import franchise - a predetermined list of locations							

Use Case ID:	UC.04										
Use Case Name:	Error Summary										
Description:	User can generate an error summary from logged errors										
Actors:	Administrator										
Pre-condition:	Sales file exists have been imported -- log exists.										
Post-condition:	A summary of errors is presented to user										
Main Scenario:	<table> <tr> <th></th><th>Actor Action</th><th>System Response</th></tr> <tr> <td>1</td><td>Specify batch to examine</td><td>Load error log</td></tr> <tr> <td>2</td><td></td><td>Generates error overview</td></tr> </table>			Actor Action	System Response	1	Specify batch to examine	Load error log	2		Generates error overview
	Actor Action	System Response									
1	Specify batch to examine	Load error log									
2		Generates error overview									
Exception Scenario:	1a. Error log does not exist, inform user 1b. Exit										

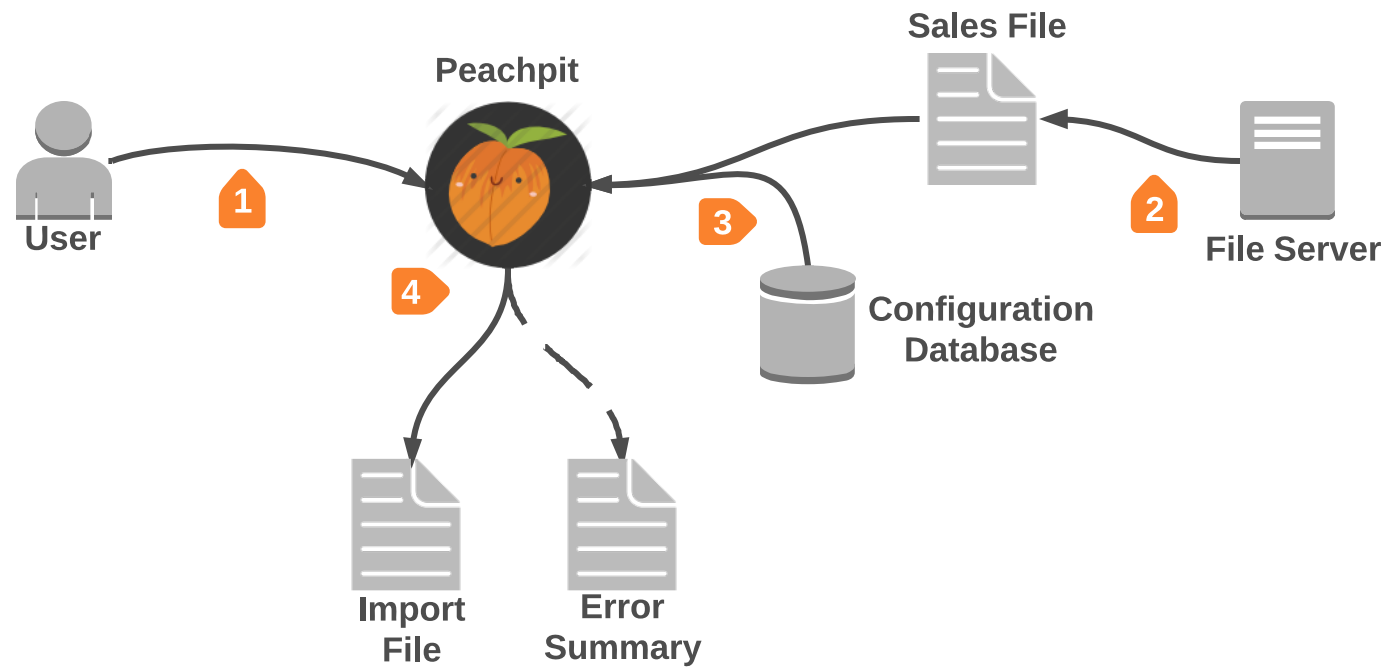
Peachpit Use Case Diagram



Activity Diagram



Peachpit Architecture Diagram



1 User selects a location or locations which to generate import files, as well as supplying desired date range.

2 Sales files are loaded from the server. If sales files are missing, an error is logged.

3 Configuration data for the sales files for the given location is loaded. If configuration information is missing, an error is logged.

4 A formatted import file is produced for each location selected by the user. If errors were logged, a summary can be produced.

UI Mockup

Our project is command line, so there is no UI mockup, however we can list commands that could be used.

Standard operation of peachpit:

```
peachpit [options] location(s) <Start Date : mm.dd.yy> <End Date: mm.dd.yy>
```

Error review:

```
peachpit err
```

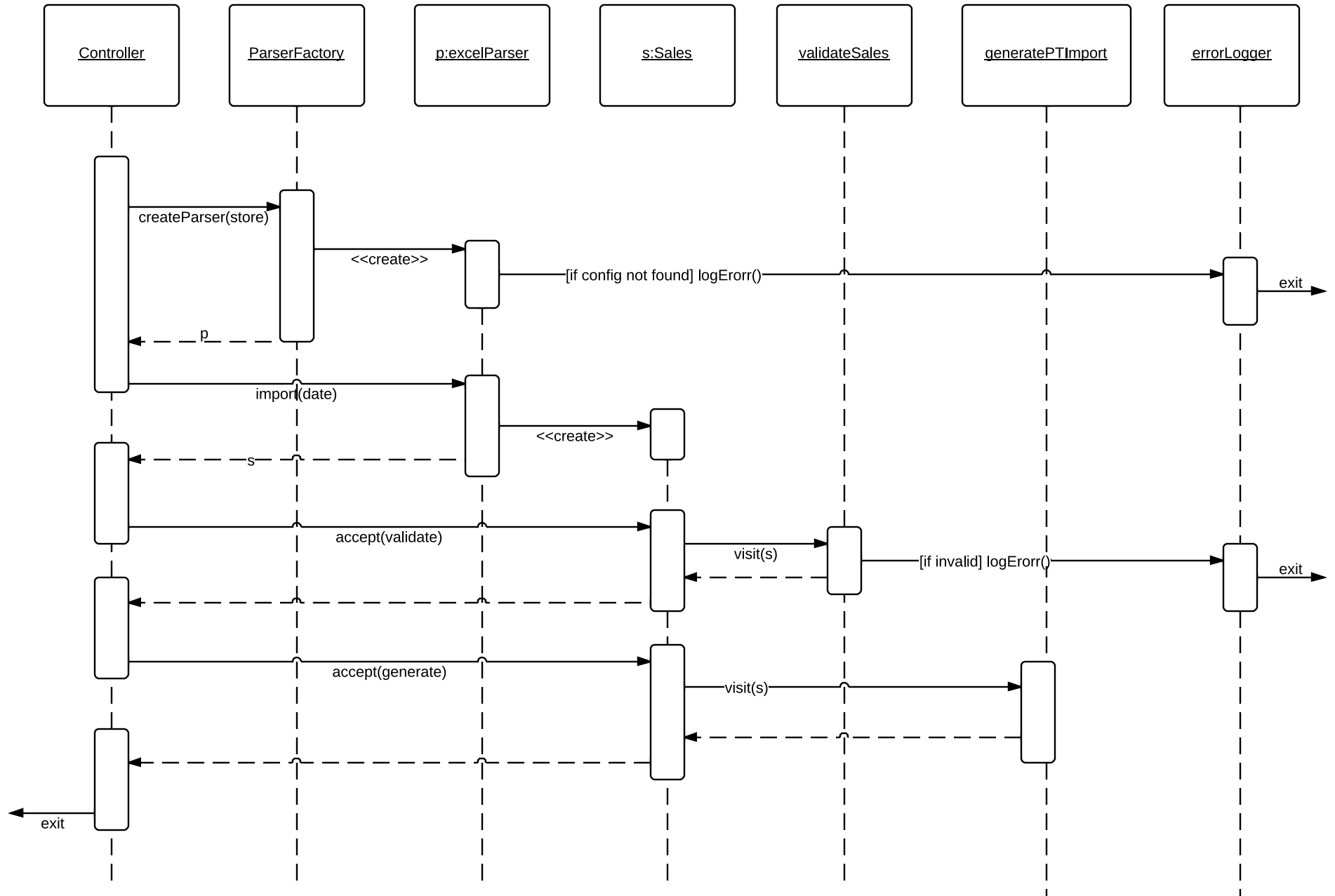
Data storage

Sales and import files will be stored on a local server, configuration information will be in a database, also on the local server. Input and output will both be CSV files. We are leaning towards MongoDB for the database.

User interactions

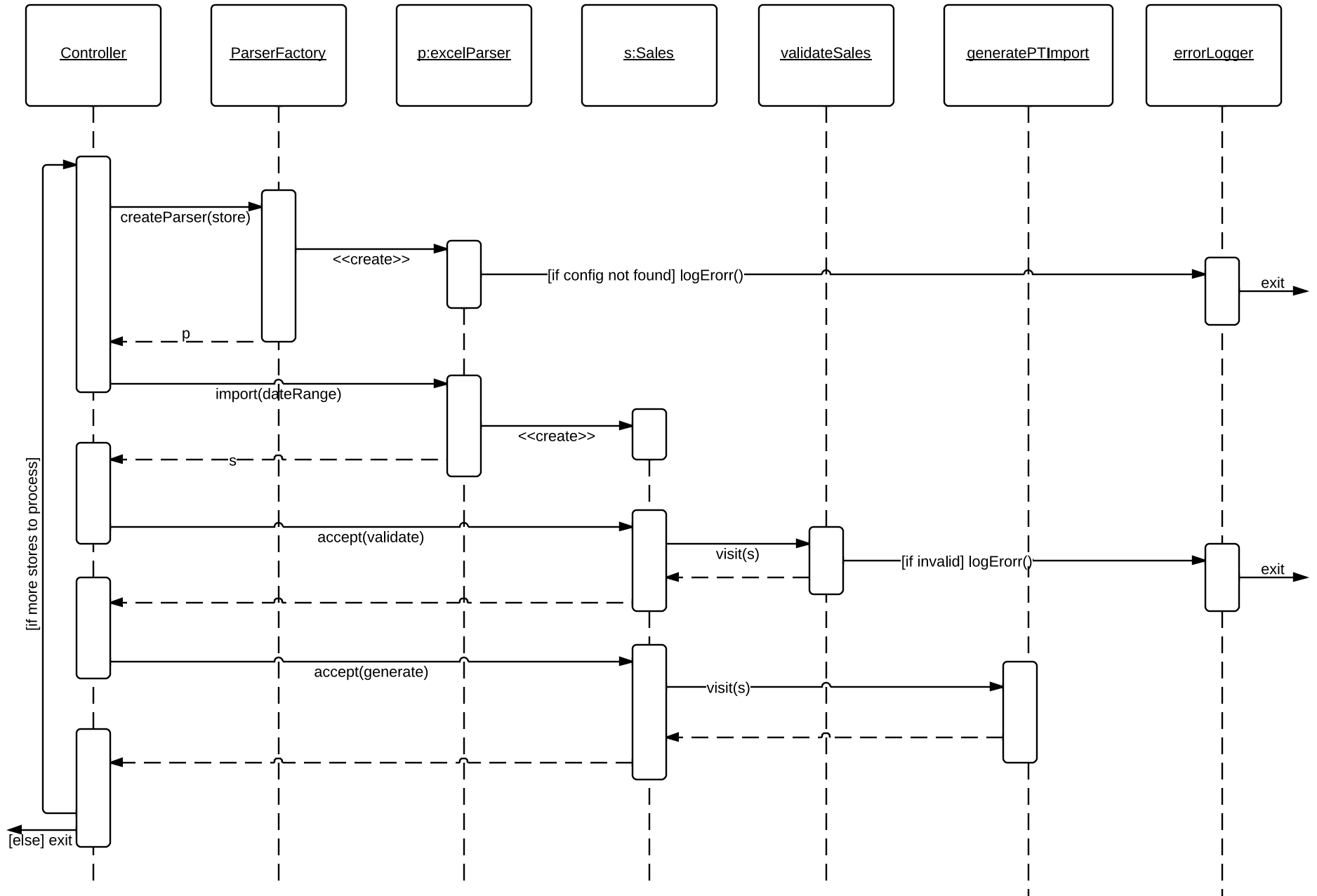
- The first use case consists of our processing one day of sales and is our simplest use case. Our system handles processing a single day of sales by creating a parser with the information from the configuration database (found from given location name). The appropriate sales file is then found and parsed, the validity of the data is checked and then import file is generated, which is then used outside of our system.

UC.01
One location - process
one day of sales

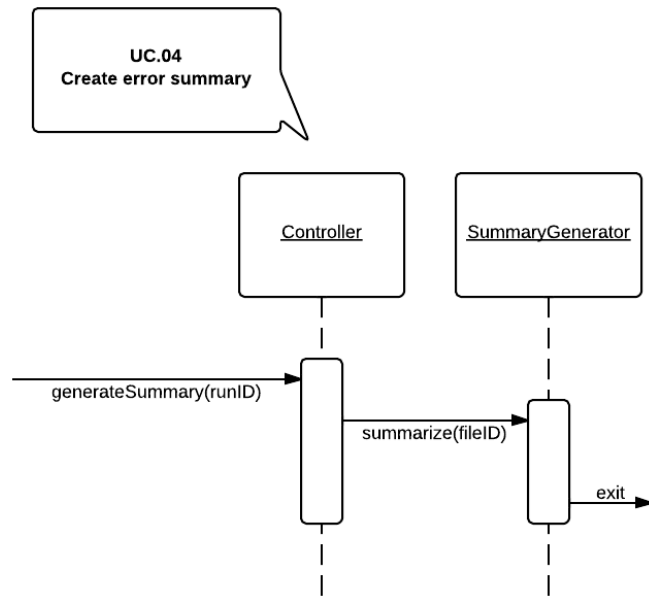


- The second use case handles a range of days. This is similar to UC.01, the only difference is the parser is given a date range versus a single date. [no diagram, only a passed parameter changes]
- The third use case handles multiple locations and a range of days

UC.03
Multiple locations -
process day range of
sales



- The last user interaction exists for ease of error correction. Peachpit will identify errors that occurred during our interaction and display to the user a summary. This is reflected in UC.04.



Peachpit Class Diagram

