

UC001 Methods

Juan Parada Claro and Adrián Guirado Luna

Use case Number	UC001
Use case Name	User requests to open a .s2v file.
Goal in context	The system processes the content of the file.
Actors and their interest	<ul style="list-style-type: none">• User.• System being developed.
Preconditions	<ul style="list-style-type: none">• The program shall be opened before.• The user shall introduce this option in the menu.• A file .s2v shall exist with a proper format.
Postconditions	A spreadsheet is available in the system if the user wants to modify something.
Basic Flow	<ol style="list-style-type: none">1. The user introduces the full path of the file.2. The system displays a message saying that the file has been opened.3. The system displays a message saying that the compute of the cells is successful. (See UC003).4. The system shows the result of the spreadsheet.
Extensions	<p>1.a The user introduces an incorrect path:</p> <ol style="list-style-type: none">1. The system displays a message of error and shows the menu again. <p>1.b The user introduces a path which leads to a not .s2v:</p> <ol style="list-style-type: none">1. The system displays a message of error and shows the menu again. <p>3.a The system detects syntax errors inside the file:</p> <ol style="list-style-type: none">1. The system will notify the user about it and which is the cell with it.
Special Requirements	All the data requirements shall be developed.

Step in the Use Case	1, 2, 3
Name of the method	computeFile
Initial list of arguments	String path: path of the file to open.
Returned Value	Spreadsheet: with all the cells formed with its content.
Exceptions	<p>1.a IncorrectPathException: Thrown if the path provided does not exist or cannot be accessed.</p> <p>1.b IncorrectFormatException: Thrown if the format of the path is incorrect.</p> <p>IOException due to open the file with the Java library.</p>

	3.a <code>SyntaxErrorException</code> : thrown when the system detects a Syntax Error.
Description	Handles the process of introducing a path of a specified file. It checks the path's existence and format and throws relevant exceptions if any issues are found. Open the file with the java library and process it translating the content of it to Java Objects. It proceeds in the same way as the user is editing the content of a cell. (See UC003 methods).
Assigned to class	<code>SpreadsheetLoader</code> : because this class will be used for loading and opening the file of the spreadsheet. SRP of Spreadsheet (only keeps the data in memory).

Step in the Use Case	4
Name of the method	<code>displaySpreadsheet</code>
Initial list of arguments	Spreadsheet: with all the cells formed with its content.
Returned Value	The method does not return any value (void).
Exceptions	The method does not throw any exception.
Description	Get the values of all the cells and display them with the next format: <code>cell_coordinate=cell_value</code> . Example: A1=3.
Assigned to class	<code>SpreadsheetPrinter</code> . SRP of Spreadsheet.