GUI_OUTPUT

Revision history

2018-05-14	Robin Lamacraft	Original draft
2018-05-30	Rod Thompson	Added diagrams, maps, revised all text
2018-06-01	Don Ferguson	Minor edits, added note on printer defaults
2018-07-03	Rod Thompson	Add PROCESS FLOW CHART Add WARNING MESSAGES
2019-02-22	Rod Thompson	Replace window graphics (v2)
2019-04-04	Don Ferguson	Replace mockups with real screenshots Replace window graphics (v3) and flowchart Rewrite to match reality of how Java outputs a table

OUTPUT GUI

This window is reached by any use of the "Output" Icon on the tool bar of another window. It provides a quick way for the user to either print the content of the project table displayed in the window or to save that content to a file.

GUI ELEMENT USE	ELEMENT TYPE	DESCRIPTION
TOP BAR	HEADING TEXT	"Output Window"
TOP BAR	RIGHT BUTTON	Only an "X" to "Close" the window
LABEL	FIXED PLAIN TEXT	"Requesting Window:"
CONTEXT	RETRIEVED PLAIN TEXT	The Title of the window that made the output request to output
CHOICE 1	RADIO BUTTON	"Output to Printer" – when selected the Output to a Printer panel(s) become visible
CHOICE 2	RADIO BUTTON	"Output to File" – when set the Output to a File functions are invoked
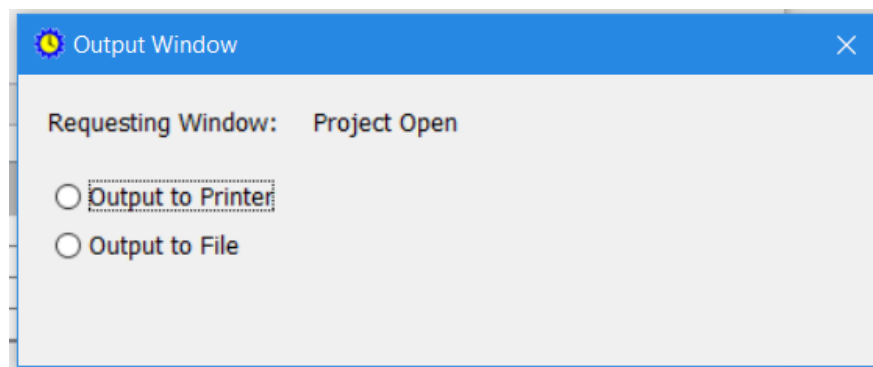
OUTPUT GUI – Initial Window

OUTPUT TO PRINTER PANEL:

This panel controls the settings for "Output to Printer" including setting of user-entered Header/Footer text. It also enables selection of further print settings by invoking the default OS Printer dialog.
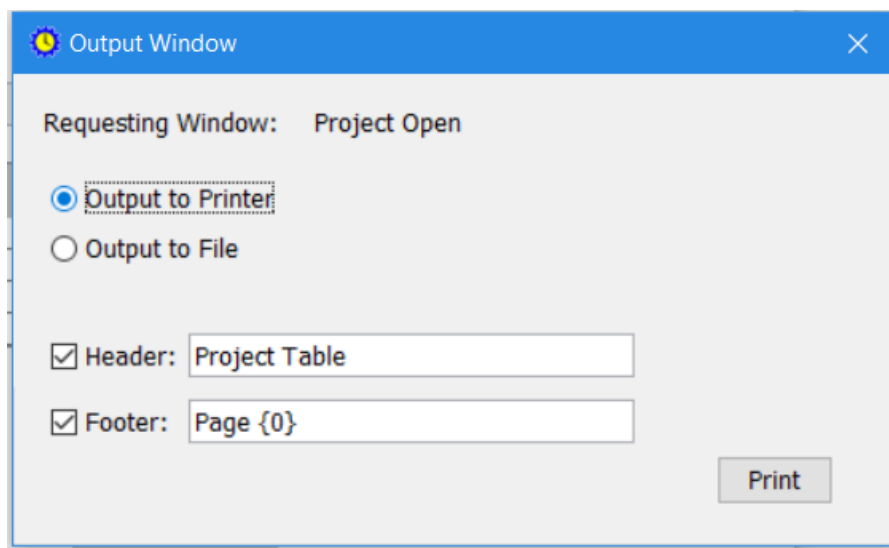
OUTPUT GUI – Printer Output selected
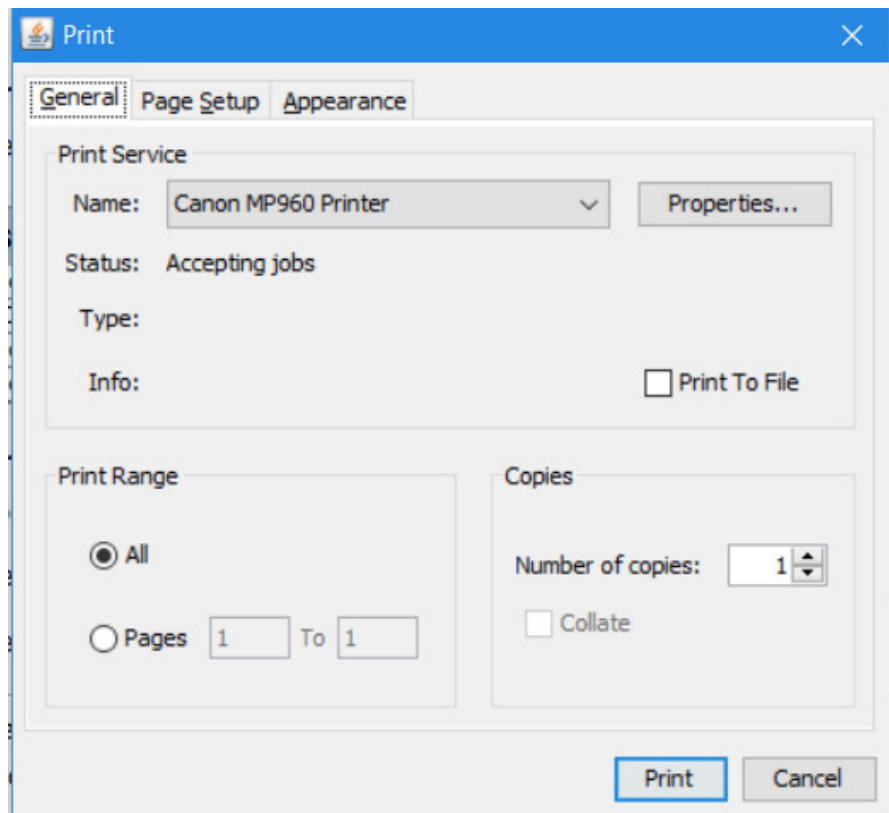
OUTPUT GUI – Sample Printer Dialog (Windows)

OUTPUT TO FILE PANEL:

Selection of 'Output to File" passes control to module 05.77 GUI_FileChooser to enable the User to select the file name and destination.

File format for output is always CSV.

Once a filename and location is entered, the Output window changes to the following:
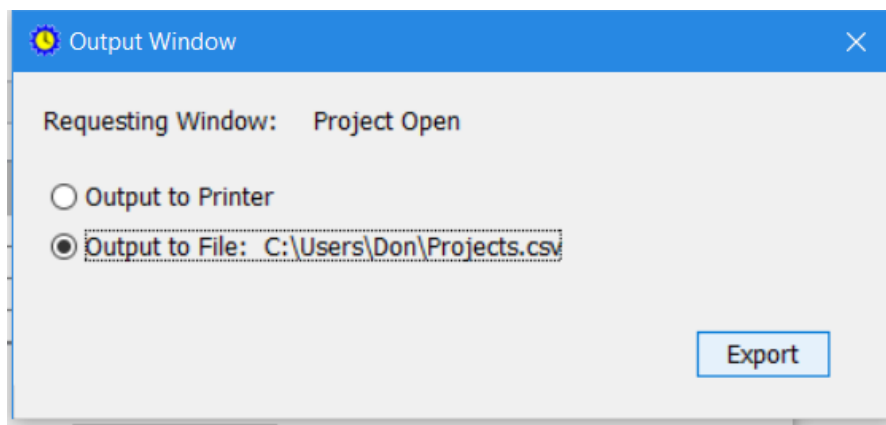
OUTPUT GUI – Sample File Export Dialog (Windows)

USED BY
All HRE users.

DATA CONTROLLED BY THIS MODULE
None.

REQUIRED DATA CONTROLLED BY OTHER MODULES
Project data from the calling window - to be output to printer or file.

REQUIRED SERVICES – Dependencies

First-Order Dependencies	Second-Order Dependencies	Higher-Order Dependencies
05.77 GUI_FileChooser		

APPLICATION PROGRAMMING INTERFACE (API)
This module requires 2 input parameters:
1) Title of the calling window
2) A JTable whose contents are to be printed or output to a file.

EVENT ACTIONS
1) Keyboard actions
   Filename entry via OS File explorer
2) Mouse actions
   <u>Left key</u>
   a. Click on 'un-checked' radio button, selects that button, and 'de-selects' the other.
   <u>Right key</u>
   To be determined.
3) Icon actions
   left mouse key click on the 'X' icon, closes the window.
4) Keyboard shortcuts
   To be determined.

WARNING CONDITIONS
For Printer output:
1) JOptionPane information message stating printing is complete
2) JOptionPane information message stating printing was cancelled.

For File output:
1) JOptionPane warning message stating the file already exists; user to proceed with over-writing the file or exit from the process
2) JOptionPane information message stating file was successfully exported.
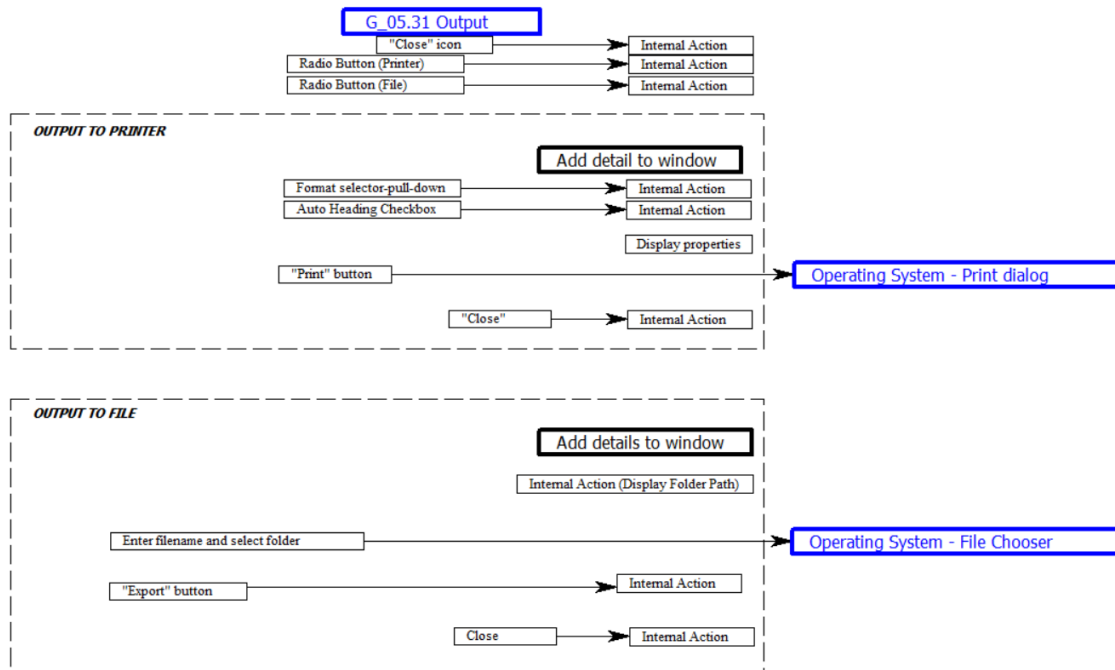
ERROR CONDITIONS

For Printer output:
1) JOptionPane error message stating printing failed, with the Printer Exception detail.

For File output:
1) JOptionPane error message stating export failed, with I/O error detail.

WINDOW INTERACTION MAP

PROCESS FLOW CHART

```
                              ┌──────────────┐
                              │    START     │
                              └──────┬───────┘
                                     │
                         ┌───────────┴────────────┐
                         │ Display request window │
                         │ with Print or File     │
                         │ radio button choices   │
                         └───────────┬────────────┘
                                     │
          PRINT              ◇ Print or Write File? ◇          WRITE FILE
      ┌───────────────────────┘                    └───────────────────────┐
      │                                                                     │
┌─────┴──────────┐                                              ┌───────────┴──────┐
│ Expand window  │                                              │ Invoke 05.77     │
│ to show        │                                              │ GUI_FileChooser  │
│ header/footer  │                                              │ module           │
│ options        │                                              └───────────┬──────┘
└─────┬──────────┘                                                          │
      │                                                          ┌──────────┴───────┐
┌─────┴──────────┐                                               │ Gather filename  │
│ When 'Print'   │                                               │ and folder to    │
│ selected, show │                                               │ write to;        │
│ OS Print       │                                               │ show 'Export'    │
│ Dialog         │                                               │ button           │
└─────┬──────────┘                                               └──────────┬───────┘
      │                                                                     │
┌─────┴──────────┐                       NO                      ◇ If file exists, does
│ When Dialog    │              ◄──────────────────────────────── user want to over-write? ◇
│ 'Print'        │                                                          │
│ selected,      │                                                        YES
│ invokes OS     │                                               ┌──────────┴───────┐
│ print function │                                               │ Write file in    │
└─────┬──────────┘                                               │ CSV format       │
      │                                                          └──────────┬───────┘
   CANCEL     ◇ Print successful? ◇    NO                                   │
┌──────────┐◄──────────┴──────────►┌──────────────┐          YES  ◇ Write successful? ◇  NO
│ Display  │                       │ Display      │         ┌──────────┴──────────┐
│ 'Print   │                     YES│ 'Print      │         │                     │
│ cancelled'│                       │ failed'     │  ┌──────┴───────┐   ┌─────────┴──────┐
│ message  │          ┌─────────────┤ message with│  │ Display 'Data│   │ Display 'I/O   │
└──────────┘          │ Display     │ error code  │  │ Exported'    │   │ error' message │
                      │ 'Printing   └──────────────┘  │ message      │   └────────────────┘
                      │ Completed'                    └──────────────┘
                      │ message
                      └──────────────
```