EnvironmentalDashboard —creates— **Dataset** —creates— **EnvironmentalDataframe**

Complaints

ChartController —uses—

Dataframe.js —uses—

Dataset

_dfObj
_fileIn
_fileProperties

Conctructor()
handleFileUploadEvent()
handleDataFrameChangedEvent()
handleApplySelectionEvent()
handleClearContentEvent()
displayDataTable()
displayColumns()
clearSelectionContent()
clearDataTableContent()
toObject()
getSelectedColumns()

EnvironmentalDataframe

_file
Dataframe
_client
_filteredDataframe

Conctructor()
getFilteredDataframe()
getDataFrame()
getDataFrameColumns()
dataFrameObject()
setDataFrameObject()
setFilteredDataframe()
notifyClients()

EnvironmentalDashboard

-memberName

utils()

creates

creates

Complaints

-memberName

getFileProperties()

ChartController

-memberName

displayColumns()
displayChart()
polarArea()
Bar()
Pie()

uses

Dataframe.js

-memberName

uses

Environmental Complaints

- Load Dataset
- Filter Dataset
- Visualize Dataset
  - <<include>> Bar Chart
  - <<include>> Pie Chart
  - <<include>> PolarArea Chart
- Statistical Metrics
  - <<include>> Min
  - <<include>> Max
  - <<include>> Average
- Export Dataset
  - <<include>> Spreadsheet
  - <<include>> Xml

User

Selecting and Loading of data set

User	System

Browse the Dataset

Select the Dataset

Wrong Format

is Dataset in Correct format

Correct Format

Load the Dataset

Display Dataset in Table

Phase

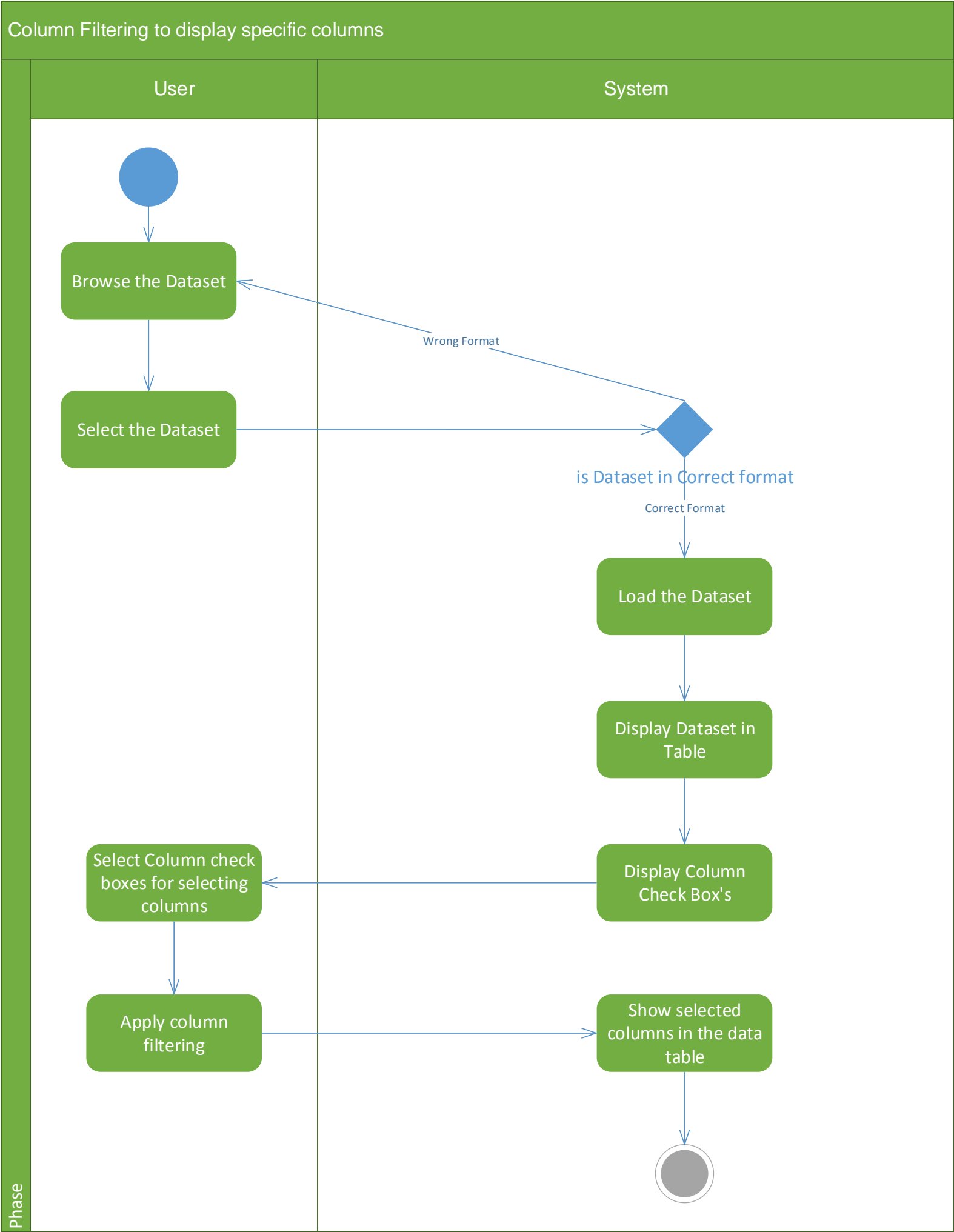System Sequence Interaction Diagram for Selecting and loading a dataset
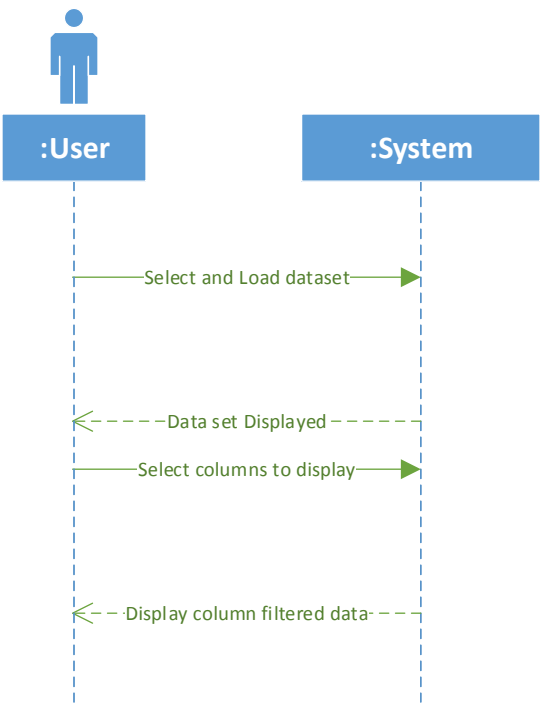
System Sequence Interaction Diagram for column filtering
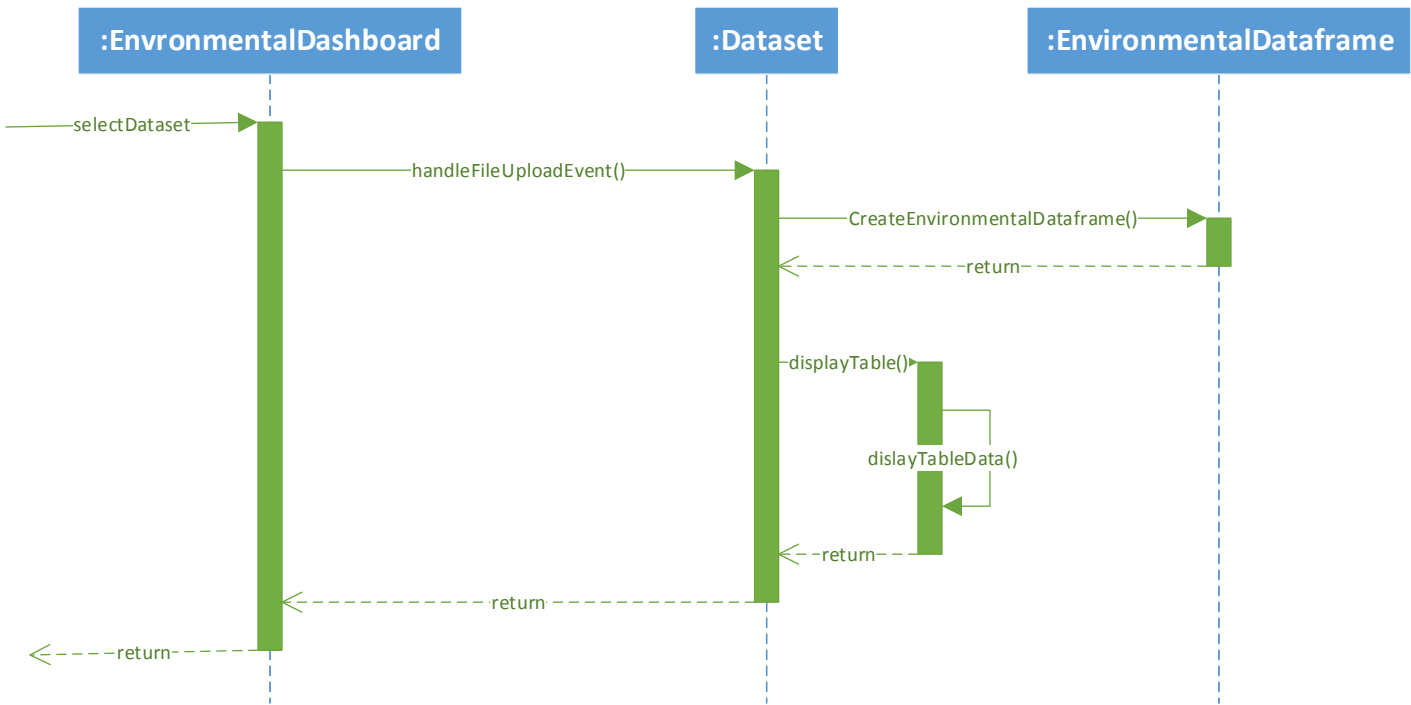
Sequence Interaction Diagram for creating order and making payment
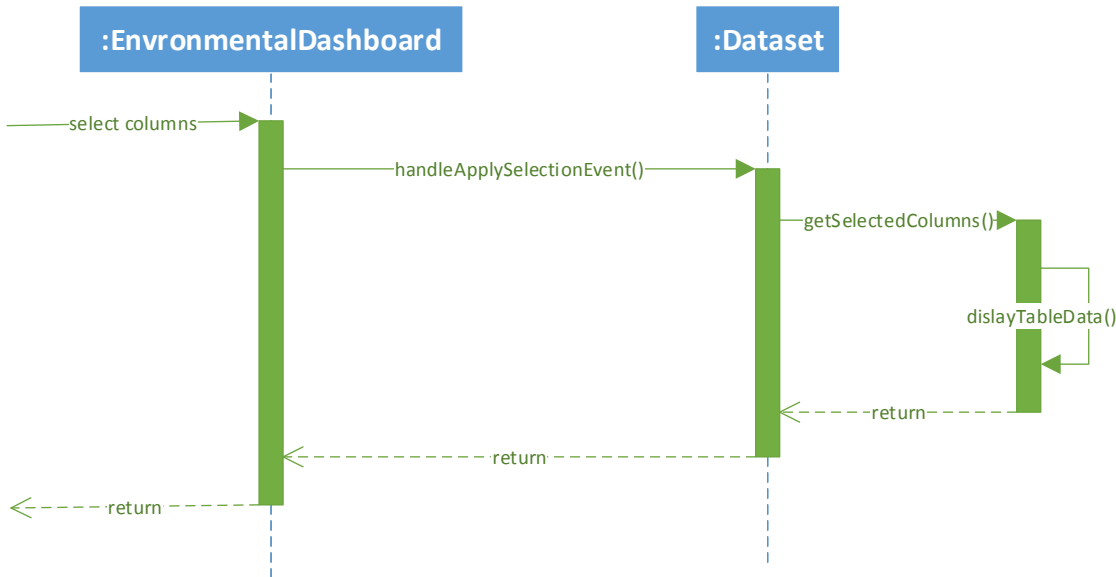
Sequence Interaction Diagram for filtering columns

Column Filtering to display specific columns

User	System

User column:

(Start node) → Browse the Dataset → Select the Dataset → Select Column check boxes for selecting columns → Apply column filtering

System column:

is Dataset in Correct format (decision) — Wrong Format → Browse the Dataset

Correct Format → Load the Dataset → Display Dataset in Table → Display Column Check Box's → Select Column check boxes for selecting columns

Apply column filtering → Show selected columns in the data table → (End node)

Displaying Chart

User	System

Chart Type

Feature — Check if Chart already is displayed

Exists

Does not exist

Destroy the old chart

Display the new chart

Phase