# CO510 Terminal Sessions Weeks 4 and 5

# Demo UML Use Cases on Papyrus

**Rogério de Lemos**

(10/10/2018)

Papyrus is an open source, Eclipse based modelling tool (not a graphical editing tool)

* Supports both UML and SysML
* There are several plugins that extend its functionality to other application domains (e.g., EAST-ADL for automotive embedded systems)
* Used by several industries and organisations, and used for teaching in other universities, e.g., Edinburgh

Installation

* Either as an Eclipse plugin or a standalone application
  + Papyrus standalone application (RCP)
    - Install either Papyrus Photon (4.0 or 4.1)
* There are two versions (3.4 and 4.0) available on University PCs
  + Students should use Papyrus Photon 4.0

Running Papyrus

* At the start of the first class, all the students should start Papyrus (the first time Papyrus runs, it needs to be downloaded)
* Before starting Papyrus, make sure that drive is mounted
  + On Moodle there are instructions on how to map a drive to **raptor**
* Once started, the workspace needs to be on raptor, **not** **bodiam**
  + Otherwise, it will run out of space

Help and support

* On Papyrus website under Documentation (not very detailed and not updated)
  + <https://eclipse.org/papyrus/documentation.html>
* On Papyrus tool under Help/Help Contents
  + Papyrus Guide/User guide
* Tutorial UML Use Cases in Papyrus
  + <https://www.youtube.com/watch?v=wuRDaN_7xq8>
  + there are other tutorials on UML class and sequence diagrams

Appearance

* Make sure that Perspective is on Papyrus
* Important windows inside Papyrus
  + Project Explorer
  + Model Explorer
  + Properties
  + Palette
  + Editor

Papyrus Project and Model

* Create a Papyrus Project
  + Two ways of doing this (general Eclipse menu or Papyrus model)
    - Changing the perspective, it changes the general Eclipse menu
  + Select UML
  + Give a name to the project
    - E.g, [login]\_TaxiCumulus
  + One can change the Root model name
    - E.g., [login]\_Portfolio1
  + Chose UML Use Case
  + It’s ready to start modelling using the modelling entities from the Palette

Using Papyrus

* One can have several models in one project and several diagrams in a model
  + The Model Explorer only show the activated model in the editor window
* Export and import projects, but not models
  + When exporting use General/Archive file
  + Don’t export Papyrus/Export all diagrams
* Projects should be saved in the workspace on raptor (create a folder just for that)
  + If the project cannot be found on raptor might be elsewhere
* Make sure that students are able to quit and return to Papyrus
  + Papyrus workspace should be on raptor

UML Use Cases

* It requires an external file to specify the scenarios
  + It can be done using a MS Word template
* The boundaries of a system are captured by the Package
* Under Properties window, one can change the properties (including naming) of the different elements of the model