

A dark blue vertical bar runs down the left side of the page. A blue arrow points to the right from the bar, containing the date.

1/14/2017

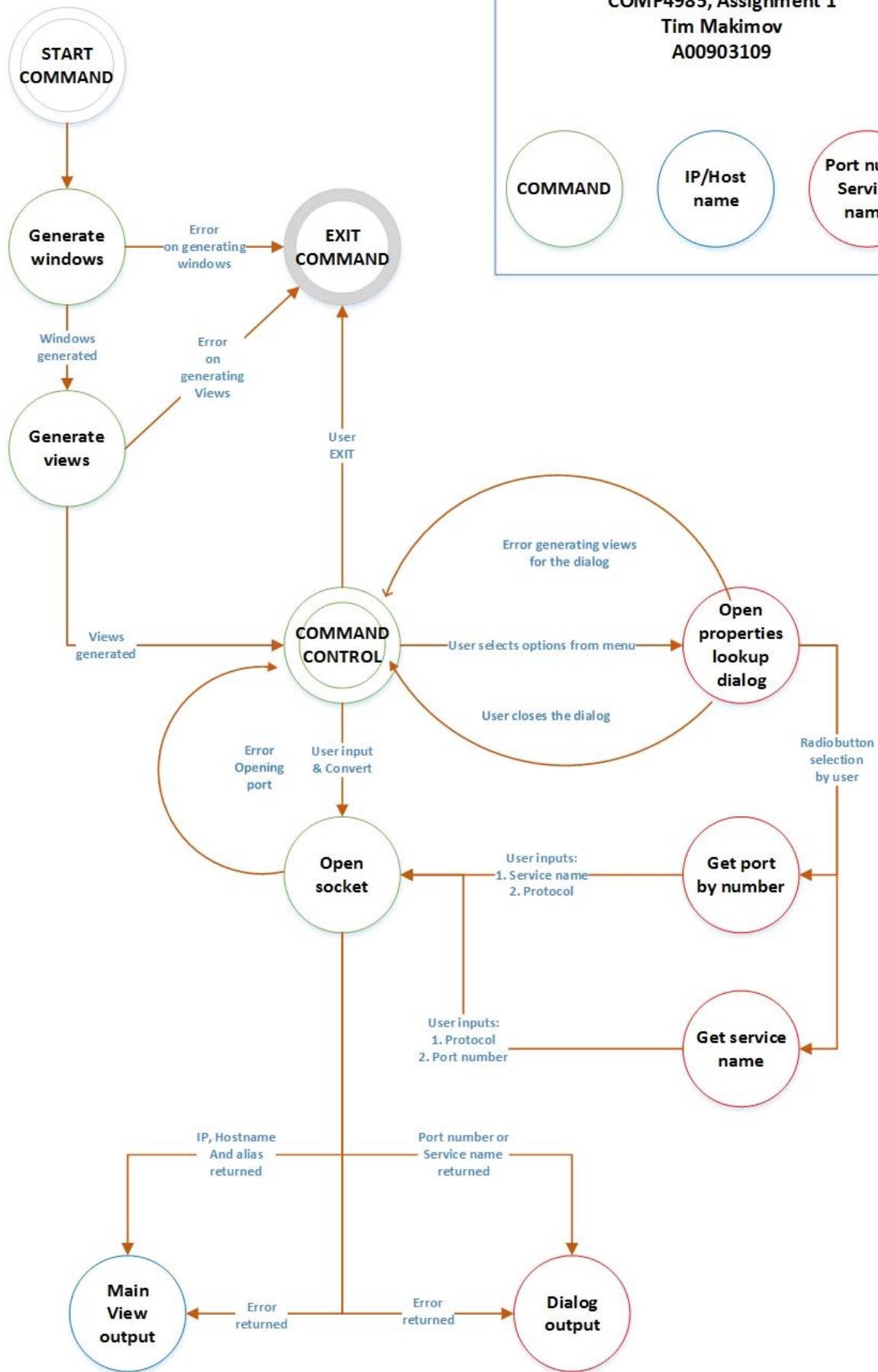
# COMP 4985

Assignment 1: Design and pseudocode

Several thin, curved lines in dark blue and light grey originate from the bottom left and sweep upwards and to the right.

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COMP4985, Assignment 1  
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# COMP 4985 Assignment Design Pseudo Code

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Date: **January 14<sup>th</sup>, 2016**

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## START

Routine Name: **start**

Preconditions:

- Starts the program execution
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## GENERATE WINDOWS

Routine Name: **main**

Activity Flow:

1. Generate views by calling generateWindows
    - Terminate program if error occurs
    - Otherwise, generate GUI
  2. Handles messages forwarded by Windows
    - Terminate program if error occurs
    - Otherwise, read messages in a loop, translate and dispatch them
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## GENERATE VIEWS

Routine Name: **generateViews**

Activity Flow:

1. Registers windows
    - Specifies parameters of the window
    - If the window can't be registered, terminate the program
    - Otherwise, register window
  2. Create view by calling utility function CreateWindow
  3. Makes window visible
  4. Updates window
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## COMMAND CONTROL

Routine Name: **main**

Activity Flow:

**Starts GUI and enables user to select IP/Hostname lookup or Port Number/Service Name lookup**

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## OPEN PROPERTIES LOOKUP DIALOG

Routine Name: **dialogProc**

Activity Flow:

1. Opens a new dialog for user's selection between Port Number and Service Name lookup

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## GET PORT NUMBER

Routine Name: **serviceToPort**

Activity Flow:

1. Disables Port Number entry field – will be used as result output
2. Enables Service name and Protocol entry fields

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## GET SERVICE NAME

Routine Name: **serviceToPort**

Activity Flow:

1. Disables Service Name entry field – will be used as result output
2. Enables Port number and Protocol entry fields

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## OPEN SOCKET

Preconditions: Valid entries have been provided by the user, else error is returned

Routine Name: **hostToIp** or **serviceToPort** (based on selection)

Activity Flow:

1. If correct input is provided from main or secondary dialog opens the socket
2. Returns IP address or Host name to main dialog
3. Returns Port number or Service name to secondary dialog
4. Returns errors

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## MAIN VIEW OUTPUT

Routine Name: **hostToIp**

Activity Flow:

1. Outputs IP address, host name and alias (if there is one)

## 2. Outputs error

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### DIALOG OUTPUT

Routine Name: **serviceToPort**

Activity Flow:

1. Outputs Service name or Port number based on user's selection
2. Outputs error