PROPERTIES
AND
BINDINGS

MODEL-VIEW-CONTROLLER

PARADIGM

IS AN ARCHITECTURAL PATTERN HEAVILY USED
IN JAVAFX AND SWING

ARCHITECTURAL PATTERNS, LIKE MVC, ARE
POWERFUL TOOLS IN DESIGNING SOFTWARE -
THEY ARE IN EFFECT 'SET PIECES' THAT ALLOW
PROGRAMMERS TO AVOID STRUGGLING WITH
SOLVED PROBLEMS

THE CONTROLLER KEEPS TRACK OF
VARIABLES IN THE MODEL AND UI
ELEMENTS IN THE VIEW..

..WHICH IT DOES BY LISTENING
FOR CHANGES IN UI ELEMENTS
(BUTTONS CLICKED, TEXT EDITED)..

..AND THEN REFRESHES THE VIEW IF THE
MODEL HAS CHANGED, OR THE MODEL
IF THE VIEW HAS CHANGED.

WOULDN'T IT BE NICE TO HAVE A WAY
TO "WIRE UP" VARIABLES, SO THAT IF
ONE CHANGED, THE OTHER GOT
REFRESHED AUTOMATICALLY?

PROPERTIES
AND
BINDINGS

PROPERTIES ARE BASICALLY MEMBER VARIABLES OF CLASS THAT ANYBODY CAN "LISTEN" ON

SO IF THE PROPERTY (I.E. THE VALUE OF THE MEMBER VARIABLE CHANGES), ANY CODE THAT IS "LISTENING" WILL KNOW IMMEDIATELY

WHEN WE SAY THAT "JAVAFX SUPPORTS PROPERTIES AND BINDINGS", WHAT WE REALLY MEAN IS –

BINDINGS ARE WAY TO LINK TWO PROPERTIES, SO THAT IF ONE CHANGES, THE OTHER IS UPDATED AUTOMATICALLY

VIRTUALLY ALL JAVAFX CLASSES MAKE VIRTUALLY ALL THEIR IMPORTANT MEMBER VARIABLES AVAILABLE AS PROPERTIES

(AND PROGRAMMERS CAN BIND TO THEM AS THEY WISH TO)

STUFF WE CAN DO WITH PROPERTIES AND BINDINGS

MAKING PROPERTIES AVAILABLE

(IN CLASSES THAT WE WRITE, MAKE
MEMBER VARIABLES AVAILABLE AS
PROPERTIES FOR OTHER CLASSES TO USE)

USING PROPERTIES OF OTHER CLASSES

(LISTEN IN ON PROPERTIES OF OTHER
CLASSES, SO THAT WE HANDLE EVENTS
IN AN EFFICIENT AND GRANULAR MANNER)

BINDING PROPERTIES TO EACH OTHER

(WIRE UP DIFFERENT PROPERTIES OF DIFFERENT OBJECTS
SO THAT CHANGES IN ONE REFLECT IN THE OTHER)