



Plate 1: Proposed graphical user interface for *EnthusiASM* tile-based visual assembly language, created using Microsoft Visio™. This example screen is of course much more busy than would normally be used during development, in order to show the functionality of each window. All windows are resizable and may be positioned anywhere within the main window. The user is currently dragging a tile from the list of **Available Tiles** to the **Tiles** window for the *hello* procedure in the *hello.asm* file, to create a new memory instruction (dashed red line at lower left). The usual next step would be to drag a source to the instruction, such as a constant or defined variable location, and then a target, such as a register location. Illegal or incomplete instructions are surrounded in red. The **Code Viewer** shows the resulting assembly language code generated by *EnthusiASM*, but cannot be modified by the user.