Introduction to Bricx Command Center

Aim: How can we navigate around the Bricx Command Center?

Goals
●Become exposed to a text based programming language
●Develop a feel for programming and navigating around Bricx Command Center
●Become familiar with the various menus of Bricx
●Use the Bricx Command Center software to observe the capabilities of the program
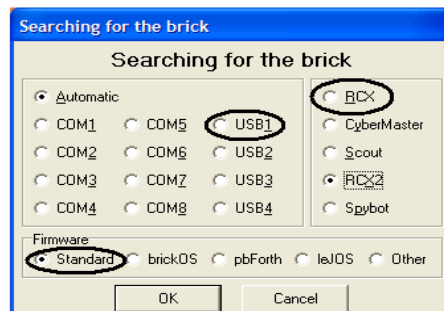
NQC
●Text Based Language
  – No More Icons
  – Requires a compiler
●Advantages
  – More powerful and concise
  – Software is free and accessible online
●Disadvantages
  – Less concrete
  – May be difficult to detect and correct errors

What's a compiler?
●Compiler – software that converts written programming language (NQC) into machine language
●Program that decodes instructions written in a higher order language and produces an assembly language program

Getting Started
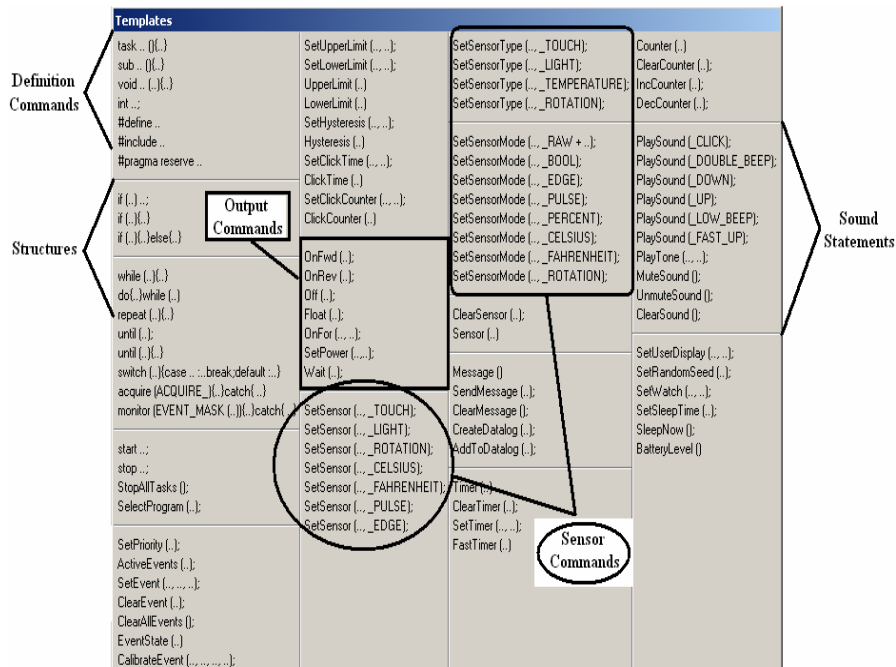●Before Bricx will open up, it must first detect the RCX brick
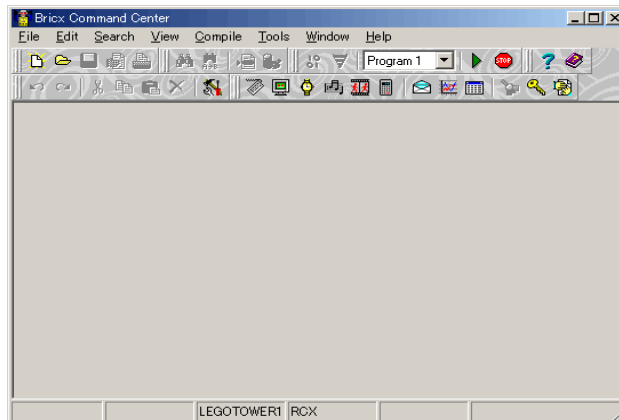
Once the RCX is detected…

● Two main windows appear
  – Templates
  – Bricx Command Center – Main Window

Templates Window

● Contains the programming statements
● Lazy people can click instead of typing commands!
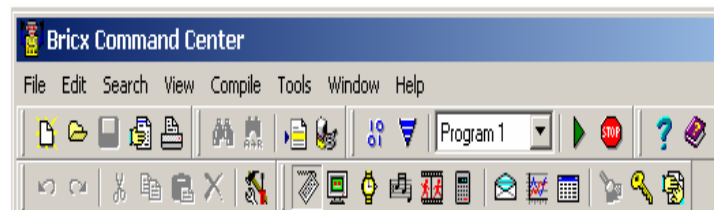● Useful if you can't remember certain commands
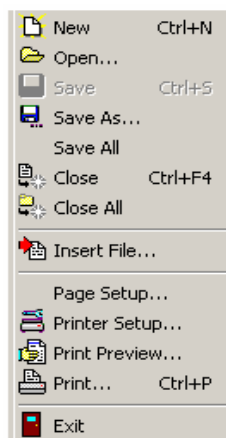

Main Window

Menus
- File
- Edit
- Search
- View
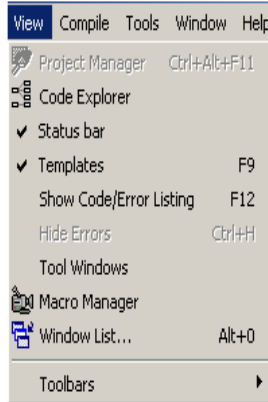- Compile
- Tools
- Window
- Help

File Menu
- Typical file menu
- Click on New to start writing a program
- Open/Save/Close/Print
- Insert File
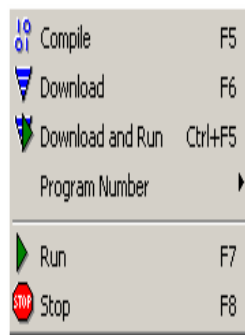 - Allows us to insert a text file that contains code

View Menu
- Allow us to select which Toolbars we want to be visible
- Shows Code/Error Listing
  - Provides list of errors in program
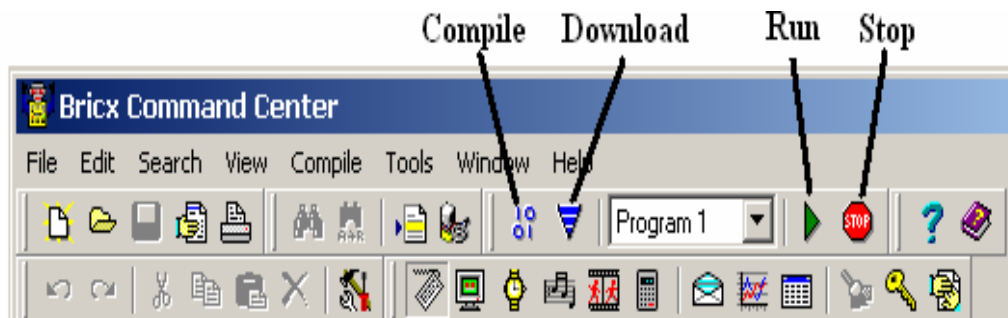 - Specifies the line the error is on

Compile Menu

●Compile – compiles program
  – Lists errors (if any)
●Download – compiles and sends program to RCX
●Download and Run – compiles, sends, and begins to run program
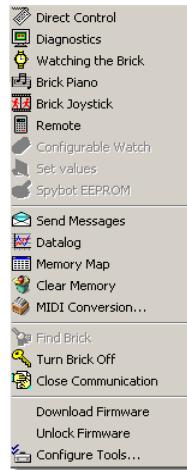●Stop – stops the RCX from running the program

Compile Toolbar

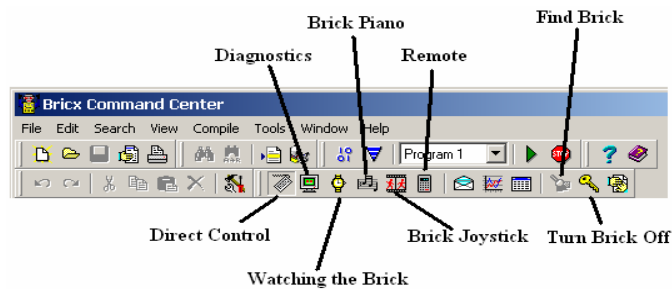●The features on the Compile menu are also available on the Compile Toolbar on the Main Window

Tools Menu
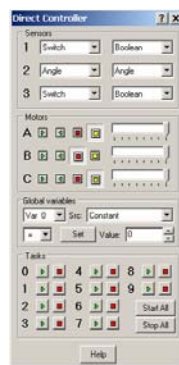●Contains several interesting features for controlling the RCX

Tools Toolbar
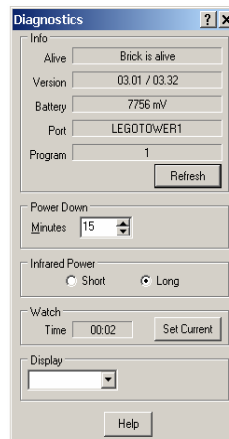●The features on the Tools Menu are also available on the Tools Toolbar on the Main Window

Direct Controller
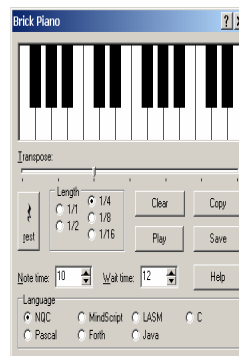●Allows you to directly control the robot through the IR tower

Diagnostics
● Let's you know that the brick is alive, along with other useful info
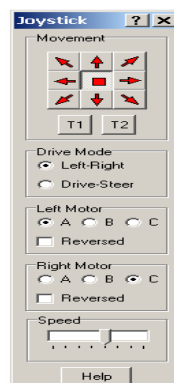

Brick Piano
● Allows you to compose symphonies to be played by the RCX
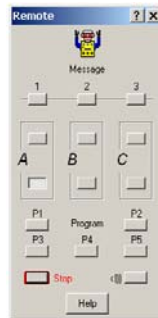● You can play through IR communication

Brick Joystick
● Control your robot's motions through the IR tower

Remote

●Similar idea to the Joystick

In-Class Activity

●Same groups you built Tankbot with
●Navigating Around Bricx Command Center Sheet