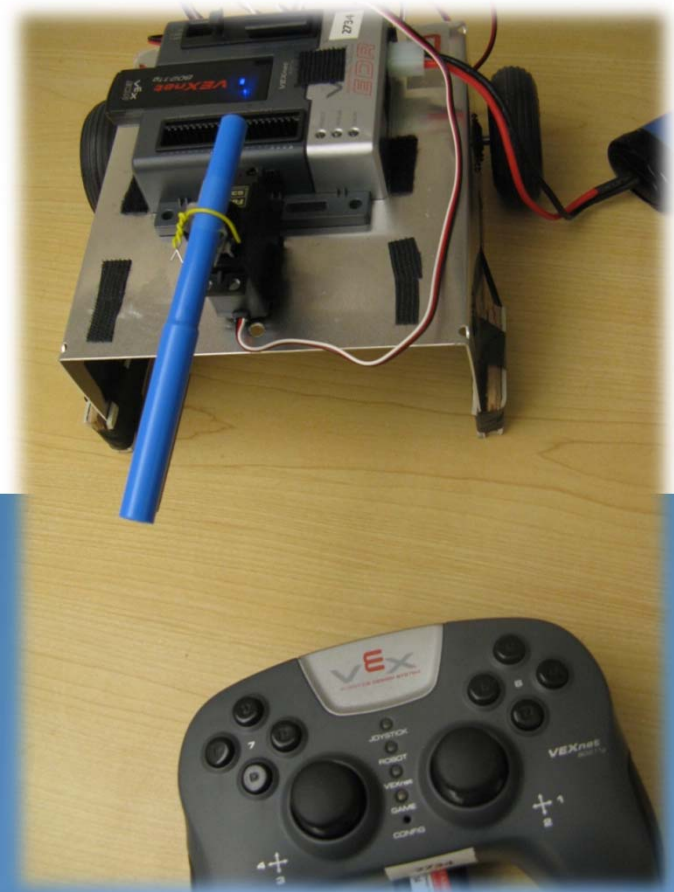


BEST Robotics Library for Simulink 2011



Outline

- Access to BEST Robotics Library
- Installation
- Launching and navigation through the UI
- BEST Robotics Library
- Creating a simple robot program
- Simulation features and their merits (debugging without hardware)
- Summary
- More Resources

How do I get access to BEST Robotics Library?

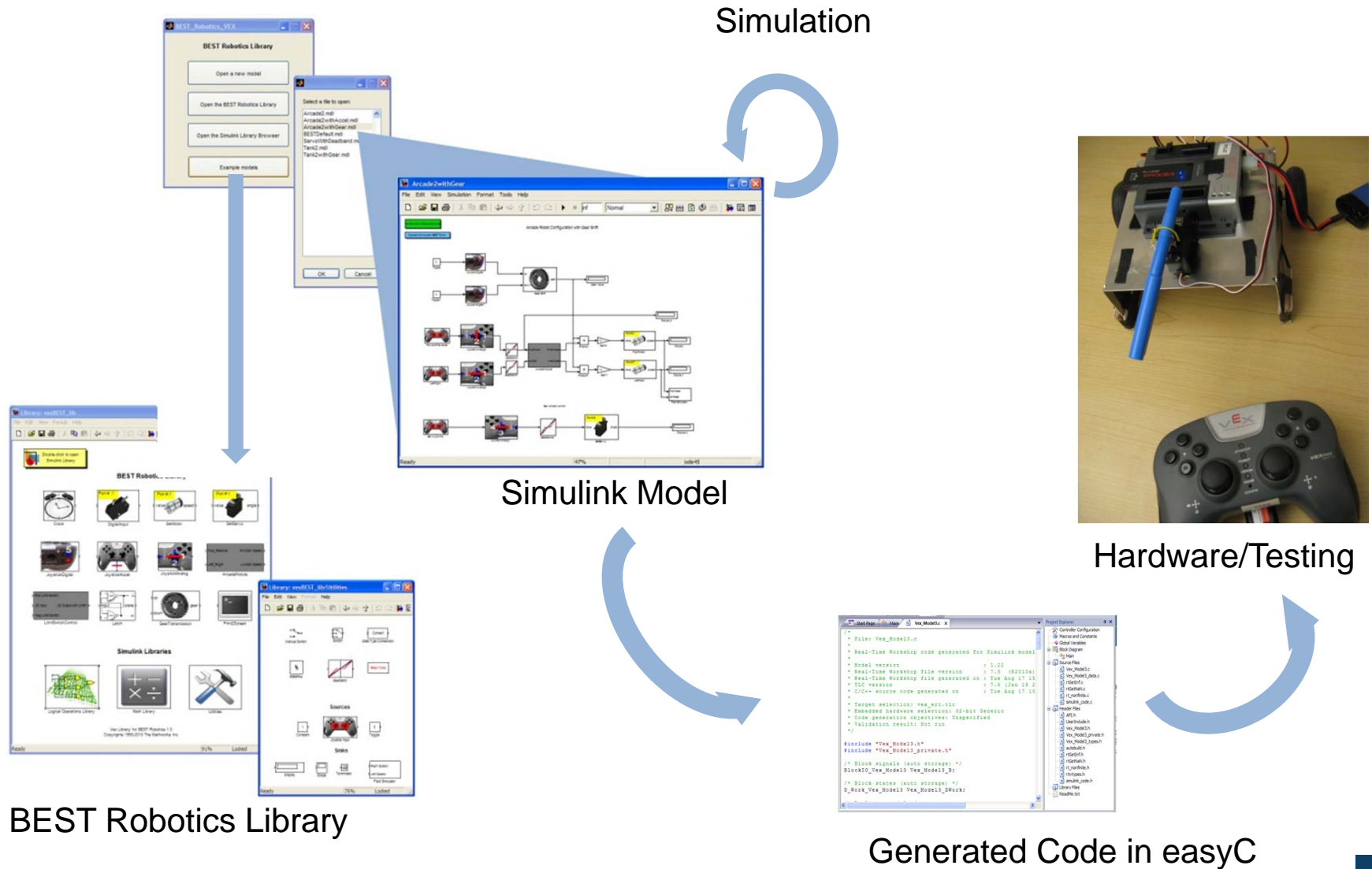
- **Contact your Hub Directors**
- Available from 2nd week of July
- Early availability this year! – For pre-competition usage
- 2 DVDs per team
- Each team has 20 installations
- **No Paperwork!!!**
- **Annual License**



Installation

- Label on the DVD has a [web address \(URL\)](#) and installation/activation keys
- Go to the URL on your PC and **FOLLOW** the instructions there to install the software
- 2 steps = 2 installers (install both as per instructions)
- System Requirement:
 - Windows XP or later version (Vista, 7)
 - Could be 32-bit or 64-bit machines
 - Need 'easy C' to download the program to VEX hardware

Workflow



Demo

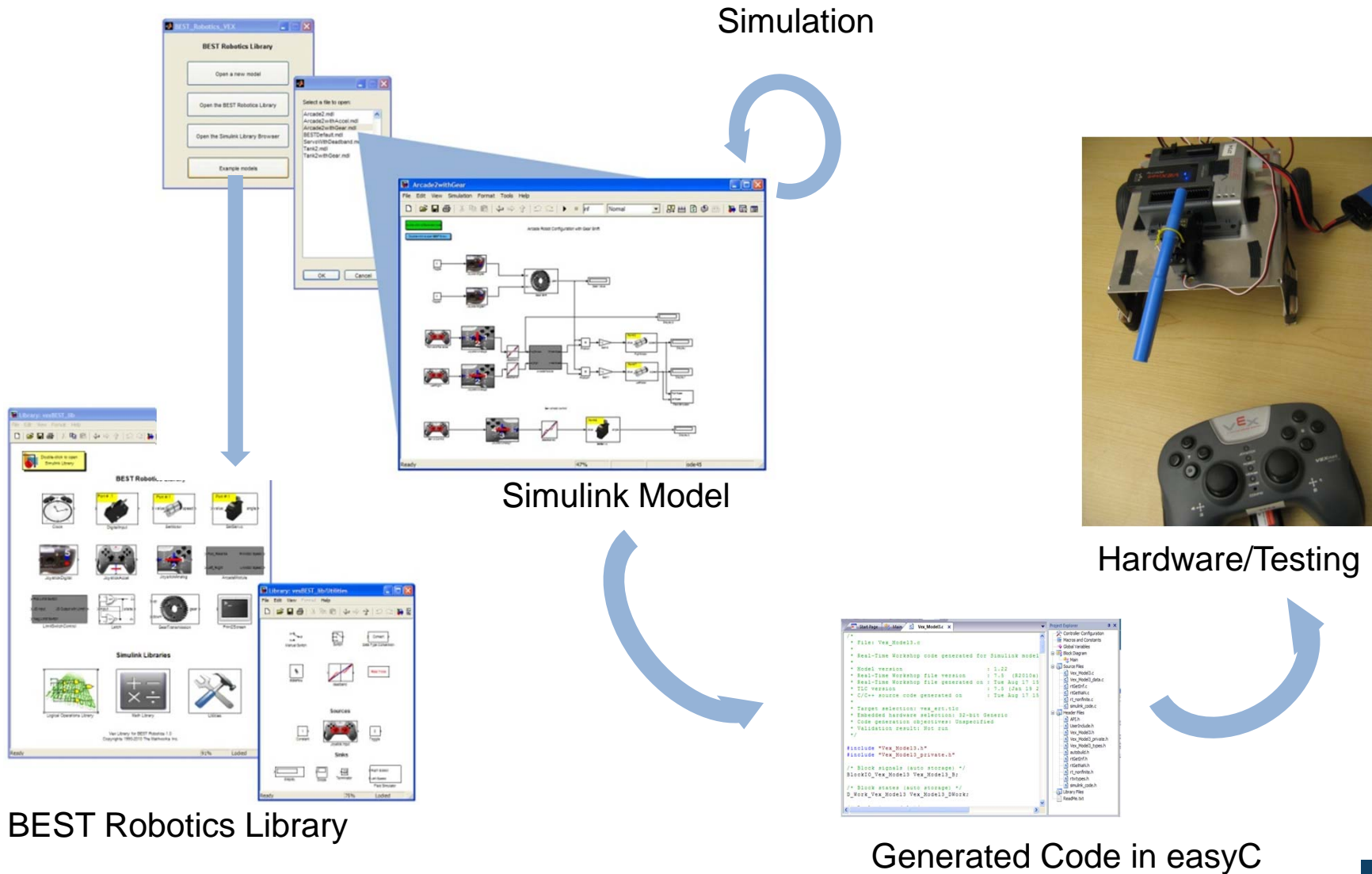
Tank2.mdl – Example model



New terms

- **Library** – group of blocks or commands
- **Blocks** – command or function
- **Simulink model** – robot program
- **Run a Simulink model** – ‘Simulate’ a program on PC
- **Generate code** - Auto generate C code from the Simulink model

Workflow...again



Things to Note

- No paperwork!
- Annual License
- Access- Contact Hub Directors (2nd week of July)
- FOLLOW instructions to install
- Windows only (Win XP or later versions)
- Useful simulation features for debugging on PC
- Contact Technical Support if any errors or issues.

Resources

- Training Resources on BEST Robotics page
 - <http://www.mathworks.com/academia/best-robotics/index.html?sec=start>
- Best Robotics Inc Website -> Participants ->Resources
- Yahoo! groups and Facebook page
 - “bestinc” Yahoo group
 - BEST Robotics Facebook page
- Contact
 - Sandeep Hiremath (shiremat@mathworks.com)
 - Todd Atkins (tatkins@mathworks.com)
 - Greg Young (greg.young@capitol-best.org)

Thank you!



Coming up next week...

Intermediate Section

- Using **math and logical operations** in your program
- Intro to **Stateflow** (finite state machines)
- **Demo** - creating Stateflow based programs