Robotics Club: 2012-2013 Schedule

Revision 3: Last updated August 18, 2012.

Contents

[August 2](#_Toc333052289)

[September 3](#_Toc333052290)

[October 4](#_Toc333052291)

[November 5](#_Toc333052292)

[December 6](#_Toc333052293)

[January 7](#_Toc333052294)

[February 8](#_Toc333052295)

[March 9](#_Toc333052296)

[April 9](#_Toc333052297)

[May 9](#_Toc333052298)

[June 9](#_Toc333052299)

# August

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Week** | **Build** | **Code/Electronics** | **Media/Spirit/Logistics** | **Fundraising** | **Finance** |
| **Focus** | **Skill-building; finish changes to robot** | **Skill-building** | **Prepare for orientation** | **Prepare to start asking sponsors** | **Make a budget, plan out expenses.** |
| **1** | CAD Seminar @ Bear Metal (might be during other weeks?) | Continue lessons with Wendy | Confirm all data and media on website and Facebook are up-to-date. | Research, create, and publish list of sponsors to contact | Talk to all other teams, and obtain a list of expected purchases and expenses |
| **2** |  | Continue lessons with Wendy | Create fliers for recruiting | Finalize all presentational materials/business plans, etc. | Construct a budget for the year, and get approval from all teams |
| **3** | Finalize and test changes, prep for farmer’s market | Continue lessons with Wendy | Prepare material for orientation. | Begin fundraising. | Prepare online bookkeeping records, receive training on bookkeeping |
| **4** | Farmer’s Market | | | | |
|  | Finish lessons with Wendy | Record Farmer’s Market | Network during Farmer’s Market |  |

# September

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Week** | **Build** | **Code/Electronics** | **Media/Spirit/Logistics** | **Fundraising** | **Finance** |
| **Focus** | **Skill-building** | **Basic introduction to coding** | **Recruit new members** | **Get money** | **Make sure nothing is wrong** |
| **1** | Move robot to Skyline, clean and prep room.  Take inventory (if necessary) |  | Get recruiting fliers approved; start pasting them in the school | Research grants and fundraising. | Talk to bookkeeper, and obtain status report on our current finances.  Update records, and assess situation. |
| **2** | Orientation for new students + officer elections  Outline expectations and safety guidelines Gauge student interest/skill levels; re-adjust plans if necessary; assign students to teams | | | | |
|  | Pass out a link to a tutorial, assign chapters to read and do.  Pass out CDs and installation instructions. | Continue passing out fliers, and recruiting.  Start making posters.  Obtain details about the club fair; begin planning.  Update club website. | Obtain list of grants to apply for.  Research requirement for grants.  Begin filling out grants (Boeing grants, etc.) | Continue obtaining status reports from the bookkeeper once a week.  Dialog with school admin to fill out open POs, confirm policy and procedure, etc. |
| **3** | Safety rules + tools workshop  Begin building a new prototype robot.  Begin learning the basics of CAD. | Review the first few chapters from the tutorial.  Team members should continue reading through the tutorial independently for the next few weeks. | Get approval, and paste posters around the school.  Get info about FIRST events, start passing around field-trip, media release, etc. forms. | Begin fundraising.  Finish filling out grants, begin submitting. | Examine budget and list of requested items, and determine if any items need to be purchased.  Confirm with exec board and mentors, and purchase. |
| **4** | Continue building the prototype robot  Continue learning CAD. | Describe how the electronics board works  Create a new electronics board. | Plan a team-building event?  Plan for Parent’s Night  Media release  Pass out t-shirt order forms | Fundraise and fill out additional grants. | Examine the parts typically offered by FIRST choice, and prioritize our list of items. Start purchases. |

# October

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Week** | **Build** | **Code/Electronics** | **Media/Spirit/Logistics** | **Fundraising** | **Finance** |
| **Focus** | **Experimenting with prototype robots** | **Practice** | **Outreach** | **Continue getting money.** | **Start purchasing and stockpiling parts.** |
| **1** | Finish the basics of the prototype robot.  Test by mounting the electronics board.  Begin working on adding additional components besides the drive. | Briefly introduce Object Oriented Programming (OOP)  Go over WindRiver and WPILIB  Help students write basic programs for the electronics board. | Research FIRST awards, and select ones for the club to focus on.  Begin coming up with new design for the buttons.  Parent’s Night | Fundraise and fill out additional grants.  Collaborate with other teams to make sure our media packages are up-to-date. | Continue stockpiling and purchasing parts. |
| **2** | Build, prototype, add, and test additional components (arms, pneumatics, sensors, etc) to the robot. | Continue working on the electronics board; run code on Bandit or the prototype bot when ready.  Introduce the concept of code-reuse, and abstraction. | Contact middle schools, set up visit times.  Collect forms.  Get a list of people who wants t-shirts. | Fundraise and fill out grants.  Brainstorm ways to make money (esp. for Awareness Night) | Continue stockpiling parts.  Take a full audit and inventory check to verify all our new procedures are working and we’re under budget. |
| **3** | Build, prototype, add, and test additional components (arms, pneumatics, sensors, etc) to the robot. | Continue working on code.  Formally introduce OOP, classes, and code organization | Modify t-shirts to include new sponsors, make any other changes necessary.  Begin ordering t-shirts. | Fundraise and fill out grants. | Continue stockpiling and purchasing parts.  Check in with all teams to make sure budget is on track. |
| **4** | Finish adding additional components to the prototype robot.  Take inventory. | Finish experimenting with individual programs. | Update website. Media release.  Begin spirit items for the competition. | Fundraise and fill out grants. Confirm financial data is accurate. Send new list of sponsors to media team. | Confirm inventory matches our records. Re-assess our budget + plans if necessary. |

# November

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Week** | **Build** | **Code/Electronics** | **Media/Spirit/Logistics** | **Fundraising** | **Finance** |
| **Focus** | **Learn CAD and engineering** | **Introduce concepts behind collaborative coding.** | **Volunteer and Outreach** | **Continue fundraising.** | **Make sure everything is in order.** |
| **1** | Acquire a computer lab, and begin learning CAD. Formally begin learning about engineering | Introduce the basics of SVN, coding standards, and basic etiquette. Set up SVN on WindRiver, and practice. | Contact various volunteer organizations (Northwest Harvest, Eastside Baby Corner) and middle schools. | Fundraise and obtain grants.  Plan for awareness night. | Continue stockpiling parts. |
| **2** | Use CAD to draw out schematics of the prototype robot for practice.  Apply engineering concepts | Modify a base program and collaboratively recode Bandit from scratch. | Arrange field trip with office, and pass out field trip forms for Kickoff  Begin planning logistics for kickoff. | Fundraise and obtain grants.  Plan for awareness night. | Continue stockpiling parts. |
| **3** | Update everything.  Make sure all our affairs our in order. | | | | |
| Continue practicing generating schematics of the prototype robot (and possibly Bandit).  Begin updating our business plan/various media on how we practice build. | Continue collaboratively recoding Bandit from scratch.  Begin updating our business plan/various media on how we learn to code. | Begin updating our business plan/various media on the outreach events we’ve done. | Begin updating the business plan/various media on our sponsors. | Begin updating the business plan/various media on how we conduct our financial affairs.  Make sure all financial info is up-to-date. |
| **4** | Finish CAD practice, review.  Continue updating. | Continue collaboratively recoding Bandit from scratch  Continue updating. | Update website. Media release.  Plan for pre-kickoff party? | Plan for Holiday Bazaar.  Coordinate with code team to make sure Bandit will be ready by then. | Continue updating and auditing. |

# December

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Week** | **Build** | **Code/Electronics** | **Media/Spirit/Logistics** | **Fundraising** | **Finance** |
| **Focus** | **Prep for build season** | **Prep for Build Season** | **??** | **??** | **Final audits** |
| **1** | Review past competitions and come up with new strategies | Finish recoding Bandit from scratch. | ISD Minicon (??) | Holiday Bazaar | Talk to bookkeeper, obtain a full status report; make sure they match up with our records. |
| **2** | Go over expectations for Kickoff, and our plans. | | | | |
| Review past competitions. | Begin uninstalling the old version of WindRiver; clear out old projects. | End-of-season party | Send follow-up emails and updates to all sponsors. | Final budget audit, make final adjustments. |
| **3** | Winter Break.  Relax. | | | | |
| **4** |

# January

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Week** | **Build** | **Code/Electronics** | **Media/Spirit/Logistics** | **Fundraising** | **Finance** |
| **Focus** | **Build the robot** | **Code the robot** | **Keeping people updated, planning spirit** | **??** | **Purchasing parts** |
| **1** | KICKOFF: Coordinate our plan. | | | | |
| Assess game rules and competition strategies  Construct plans and schematics of the new robot | | | | |
| Once design is finalize, make CAD schematics.  Send list of needed parts to the finance team.  Begin building competition props. Begin building the drive.  Modify prototype robot as needed. | Burn copies of CDs for everybody.  Begin installing the new environment.  Set up SVN, set up a basic code base.  Create an electronics board. | Take pictures of everything, frequently publish updates + update website.  Update sponsors on recent events.  Begin planning spirit-related stuff for the competition. |  | Get list of parts we need from the build teams; prioritize them, and order them via FIRST choice. |
| **2** | Finish building the drive + competition props.  Continue making components and additions (to both robots) | Talk to build team leads to obtain specs. Begin coding to the specs. | Update website, media, the school, and sponsors.  Continue making spirit-related stuff for the competition |  | Order parts we need |
| **3** | Continue making components and additions (to both robots) | Finish coding the major parts. Create a driver station, and prepare controllers. | Update website, media, the school, and sponsors. |  | Order parts we need |
| **4** | Triage: assess our progress; determine what we need to build now, and what we can put off.  Determine if our initial plans are realistic, adjust if necessary. | | | | |
| Finish building major pieces. | Finalize code, and begin testing | Update website, media, the school, and sponsors. |  | Order parts we need.  Assess our budget. |

# February

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Week** | **Build** | **Code/Electronics** | **Media/Spirit/Logistics** | **Fundraising** | **Finance** |
| **Focus** | **Make modifications.** | **Make modifications. Improve control systems.** | **Keep people updated, making spirit items.** | **??** | **Ordering parts** |
| **1** | Update prototype robot to match actual robot.  Modify robot as necessary | Drivers’ practice and tweak code.  Assess our strengths and weaknesses, what we can do to improve. | Update website, media, the school, and sponsors.  Continue making spirit-related stuff for the competition |  | Order parts we need |
| **2** | Final modifications.  Record all specs about the robot. | Final modifications | Update website, media, the school, and sponsors. |  | Order parts we need (for the prototype bot) |
| STOP BUILD: seal the robot. | | | | |
| **3** | Take full inventory.  Begin planning and building our additional 30 pounds. | Preserve current code revision, begin cleaning up, and documenting.  Begin modifying and improving control systems. | Update website, media, the school, and sponsors.  Plan and throw a party. |  | Talk to bookkeeper, obtain status report; make sure they match up with our records.  Assess our inventory and our budget. |
| **4** | Continue modifying prototype robot, and building additional parts. | Tweak code, drivers’ practice. | Finish making spirit-related stuff for the competition |  | Continue assessing our inventory, our budget, and do a full audit. |

# March

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Week** | **Build** | **Code/Electronics** | **Media/Spirit/Logistics** | **Fundraising** | **Finance** |
| **Focus** | **Attend competition(s)** | | | | |
| **1** |  |  |  |  |  |
| **2** |  |  |  |  |  |
| **3** |  |  | Try having our robot featured in an assembly |  |  |
| **4** |  |  |  |  |  |

# April

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Week** | **Build** | **Code/Electronics** | **Media/Spirit/Logistics** | **Fundraising** | **Finance** |
| **Focus** |  |  |  |  |  |
| **1** |  |  | Awareness night |  |  |
| **2** |  |  |  |  |  |
| **3** |  |  |  |  |  |
| **4** |  |  |  |  |  |

# May

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Week** | **Build** | **Code/Electronics** | **Media/Spirit/Logistics** | **Fundraising** | **Finance** |
| **Focus** |  |  |  |  |  |
| **1** |  |  |  |  |  |
| **2** |  |  |  |  |  |
| **3** |  |  |  |  |  |
| Tie up all loose ends, and end robotics club for the year. | | | | |
| **4** | Schoolwork (and occasional workshops) | | | | |

# June

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Week** | **Build** | **Code/Electronics** | **Media/Spirit/Logistics** | **Fundraising** | **Finance** |
| **Focus** |  |  |  |  |  |
| **1** | Concentrate on schoolwork and finals  Do occasional workshops and planning meetings. | | | | |
| **2** |
| **3** |
| **4** |