

I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi im. M. Kopernika w Krośnie
0740
Poland

Team members:

Kacper Augustyn
Szymon Budziak
Maciej Ćwieka
Karol Jurasz
Jan Jurasz
Maciej Kazalski
Mateusz Kuraś
Aleksander Lenart
Maciej Lisak
Filip Misiak
Kacper Paszek
Adrian Rachowicz
Miłosz Rachwał
Paweł Sajdak
Mateusz Winiarski

Period One — Project Plan

Goals and Tasks for Botball 2019

Game Goals and Tasks	<i>Deadlines</i>
1. Review the documents available on Team Homepage	4.02.2019
(a) Distribute game rules to each team member	4.02.2019
(b) Watch game review movie on projector	4.02.2019
2. Build game board	22.02.2019
(a) Prepare list of materials and their local equivalents to purchase	8.02.2019
(b) Construct board base and assemble PVC elements	15.02.2019
(c) Construct buildings from corrugated plastic	22.02.2019
3. Brainstorm strategies of completing game tasks	22.02.2019
(a) Review and discuss game objectives with team members	15.02.2019
(b) Student team leader will select game tasks to perform	22.02.2019

Robot Building Goals and Tasks	<i>Deadlines</i>
1. Assemble demobots	22.02.2019
(a) Assemble LEGO demobot	18.02.2019
(b) Assemble Create demobot	22.02.2019
2. Construct final LEGO robot	29.03.2019
(a) Complete a concept drawing for LEGO robot	1.03.2019
(b) Construct drive chassis	15.03.2019

(c) Construct grabbing claw	29.03.2019
3. Construct final Create robot	29.03.2019
(a) Complete a concept drawing for Create robot	4.03.2019
(b) Mount additional sensors and Wallaby controller on chassis	18.03.2019
(c) Construct high-reach arm for picking objects from skyscrapers	29.03.2019

Programming Goals and Tasks

Deadlines

1. Code environment preparation	4.03.2019
(a) Examine Wallaby software architecture	15.02.2019
(b) Setup code repositories in version control system	1.03.2019
(c) Develop platform abstraction layer to enhance code reuse between LEGO robot and Create	4.03.2019
2. Develop software for LEGO robot	26.04.2019
(a) Program robot movements using line detection	22.03.2019
(b) Program grabbing arm mechanism	8.04.2019
(c) Perform tests on game board with simultaneous Create robot operation	26.04.2019
3. Develop software for Create robot	26.04.2019
(a) Assess viability of integrating robot position from multiple sources using Kalman filter	11.03.2019
(b) Program camera object and line detection	29.03.2019
(c) Perform tests on game board with simultaneous LEGO robot operation	26.04.2019

Documentation Goals and Tasks

Deadlines

1. Complete documentation for first period	18.02.2019
(a) Team meeting to decide on schedule, task assignment and conflict resolution	8.02.2019
(b) Establish building and programming goals and tasks	18.03.2019
2. Complete documentation for second period	11.03.2019
(a) Gather necessary information from build team for assignment	8.03.2019
(b) Gather necessary information from programming team for assignment	8.03.2019
3. Complete documentation for third period	1.04.2019
(a) Gather information from team members about lessons learned	29.03.2019
(b) Gather necessary information from programming team for assignment	29.03.2019

Schedule Conflicts

1. Winter holiday — many team members will be absent (11th February - 22nd February)
2. Many team members are taking part in other contests
3. Sometimes team members may be late to meetings due to school lessons

Team Organization

Schedule of Meeting Times

Regional workshop — January 31st and February 1st

Regional tournament — from May 8th to May 11th

Each meeting will be run from 14:15 to 16:15

Schedule for February — 4th, 8th, 11th, 15th, 18th, 22nd, 25th

Schedule for March — 1st, 4th, 8th, 11th, 15th, 18th, 22nd, 25th, 29th

Schedule for April — 1st, 5th, 8th, 12th, 15th, 19th, 22nd, 26th, 29th

Schedule for May — 3rd, 6th

Division of Labour

Teacher Maciej Jagieło

Student Team Leader Aleksander Lenart

Board Building Team Szymon Budziak, Maciej Kazalski, Adrian Rachowicz, Paweł Sajdak, Mateusz Winiarski

Documentation Team Kacper Augustyn, Jan Jurasz, Miłosz Rachwał

LEGO Robot Building Team Jan Jurasz, Aleksander Lenart, Mateusz Kuraś

Create Robot Building Team Karol Jurasz, Filip Misiak, Maciej Lisak, Kacper Paszek

Programmers Maciej Ćwięka, Miłosz Rachwał

Conflict Resolution

Team agreed that eventual conflicts and disagreements would be handled in the following way:

1. Team members who are in disagreement should first attempt to work out the conflict together.
2. If solution cannot be reached, the conflict would be brought to student team leader, Aleksander Lenart, who will take a decision.
3. If conflict involves student team leader, it will be brought to teacher Maciej Jagieło, who will then bring it to team vote which will be final.