

Personal Development Plan – Version 2

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LO1: Student plans and executes a project in their track at level 2 of the HBO-i framework regarding autonomy and complexity, in an agile way

In my own words:

I want to build a small robot toy, that can drive, detect walls and do small tricks. I will focus on two main areas: Analysis and implementation in hardware interfacing and software.

This is at level 2 of the HBO-I framework, because we will autonomously solve issues that arise from the project, and the context of the project is structured and unpredictable. There will be several basic concepts and a few in depth concepts.

Plan:

Week 3: Initial Project Idea (DONE)

Week 4: Work Breakdown Structure, Project Development Plan, List of Components (DONE)

Week 7: Project Charter, Project Pitch (DONE)

Project Week 1: Read datasheets for display, display controller, microphone, motors, servo.

Tried to use the microphone to record audio for voice commands, ran into issues due to missing amplifier in the microphone.

Created 3d files for body of the car, steering, motor holders.

Tested steering of the car.

Project Week 2: Improved 3d files for steering, added connectors for lego wheels. Created 3d files for gearboxes to increase motor torque. Improved gearbox to wheel connectors for more stable wheel rotation. Tried to make a small program to test drive the car. Ran into issues because of too low motor torque and too high of a current draw from the motors at start up. (Current Motors run at 3v, would be better to use 5v gear motors.)

LO2: The student demonstrates professional skills at level 2 in the focus areas: future-oriented organization, investigative ability, personal leadership, and targeted interaction.

In my own words: I want to further develop my professional skills by behaving respectful to stakeholders and delivering appropriate, relevant products that are meeting the requirements of the project.

Future-oriented organization is concerned with how teams work in flexible ways that adapt to changing situations. Investigative ability, this is about thinking critically and solving question that come up in the project. Personal leadership is about developing as a person in the context you operate in. Targeted Interaction is concerned with communication and collaboration, which play a key role when developing projects as a group.