

## 1 INTRODUCTION AND PREPARATION

TO-DO:

- nakaj o namenu te knjige.
- kako je napisano in
- kako ga uporabljati

Welcome to the educational robotics lecture using Arduino, Robduino module, and Fischertechnik parts! In this lectures, we will learn how to use these tools and materials to build and program simple robots for educational and recreational purposes.

First, we will introduce the Arduino controller and the Robduino module, and discuss their capabilities and limitations. We will also cover the basics of the Arduino programming language, including variables, functions, and control structures.

Next, we will discuss the Fischertechnik parts and how they can be used to construct robots with various shapes, sizes, and capabilities. We will cover the different types of parts that are available, such as beams, gears, motors, and sensors, and how they can be combined to create a wide range of structures and mechanisms.

We will then demonstrate how to use the Arduino controller and Robduino shield to program and control Fischertechnik robots. We will cover topics such as sensor input, actuator output, and feedback control.

Throughout this lecture, we will use hands-on activities and examples to illustrate the concepts and techniques that are covered. We will also discuss some of the challenges and considerations that are involved in building and programming robots with these tools and materials.