

The role of passwords in cybersecurity

1st Lilo Zobl
Botball Team HTL Anichstraße
HTL Anichstraße
Innsbruck, Austria
lzobl@tsn.at

Abstract—This document is part of the ECER 2023 conference on educational robotics. It follows the topic of cybersecurity and will focus on the role of passwords.

Index Terms—component, formatting, style, styling, insert

I. INTRODUCTION

This paper will focus on the wide use of passwords in IT-security. It will focus on the security aspect of passwords, especially on weak passwords due to user (human) laziness. It will cover state of the art password technologies (2 factor authentication with passkeys) and possible future technologies. Additionally it will try to highlight alternatives for effective password management and introduce a choice of selected password managing software.

Finally the paper includes a best practice guide to:

- check if user's passwords have already been breached
- create an easy to remember but secure master password for a password managing software

II. CURRENT AND FUTURE STATE OF THE ART

III. CONCEPT AND IMPLEMENTATION FOR BEST PRACTISE