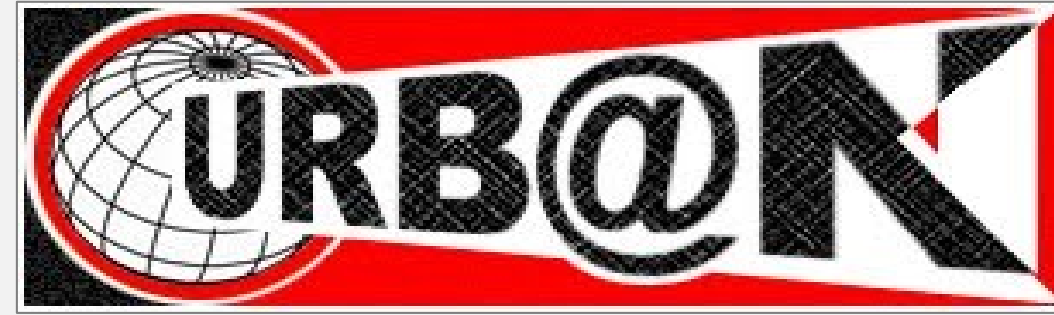


# Enhancing student learning and experience with automated marking of computing assessments



James Dodds and Dr. Suraj Ajit

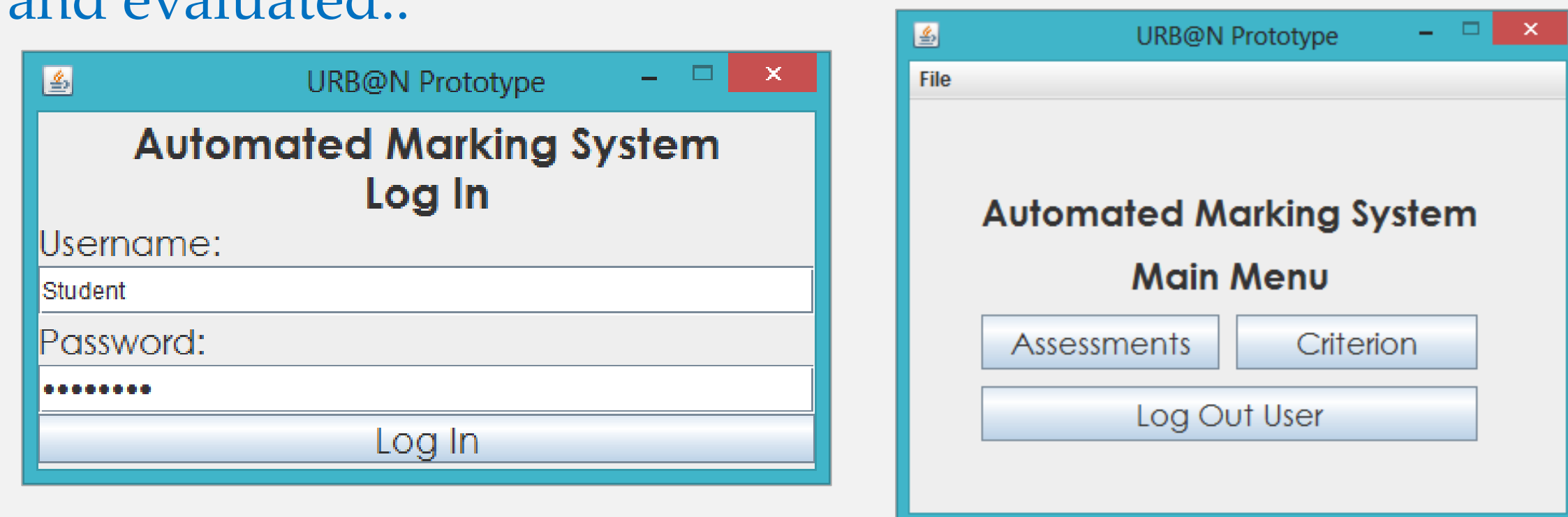
## 1) Introduction

With technology becoming more important in our lives and in our society, we come to use and depend on it more and more. In this research, we analysed and evaluated the effectiveness of improving a student's learning experience using an automated marking system with a view to replace human marking of formative course assessments within computing.

Can automated marking of formative assessments be used to enhance a student's learning experience?

## 2) Methodology

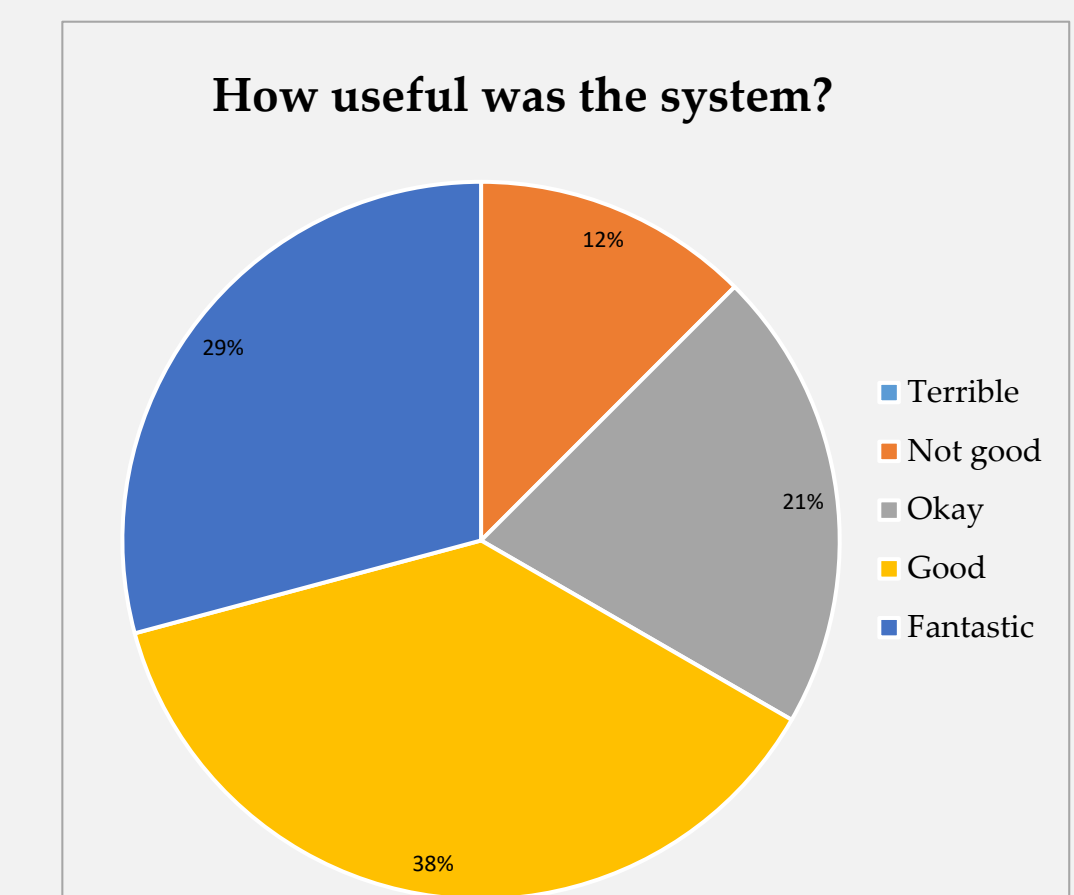
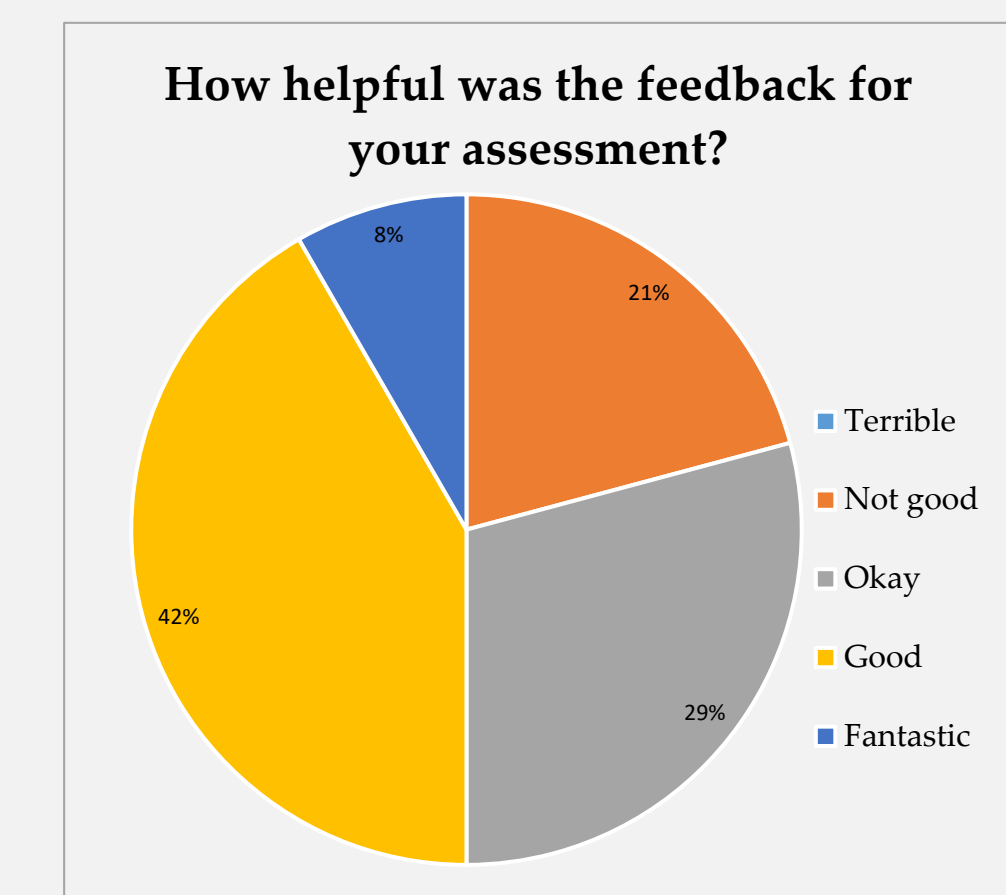
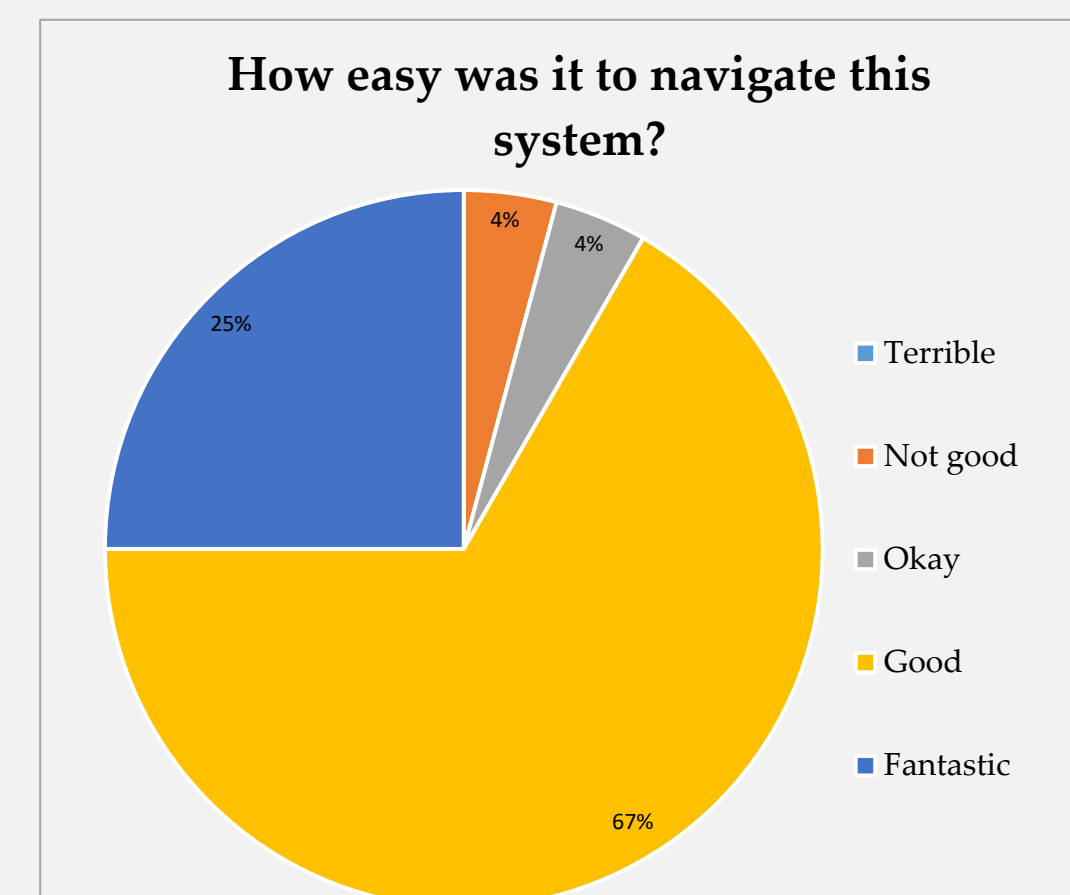
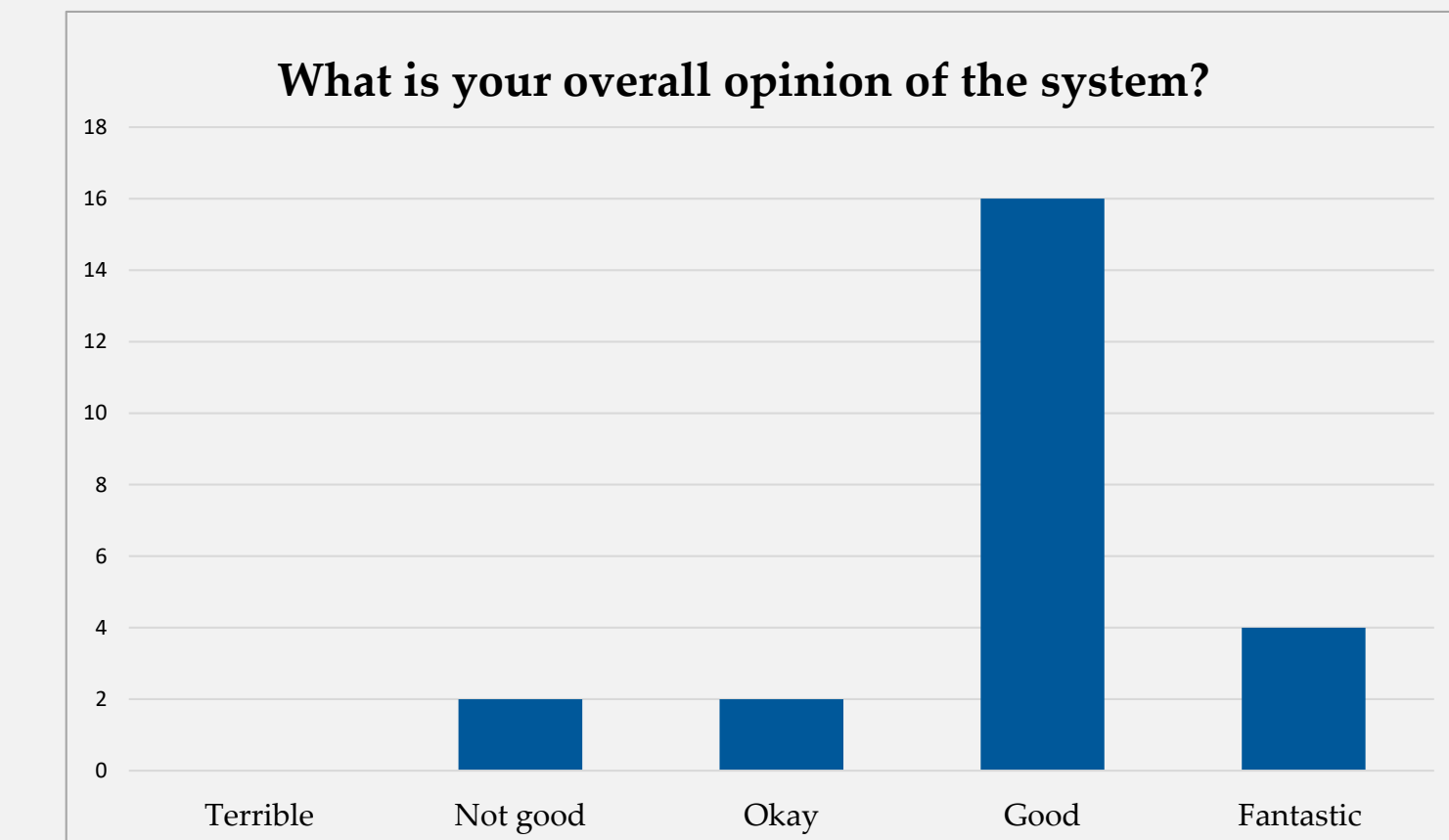
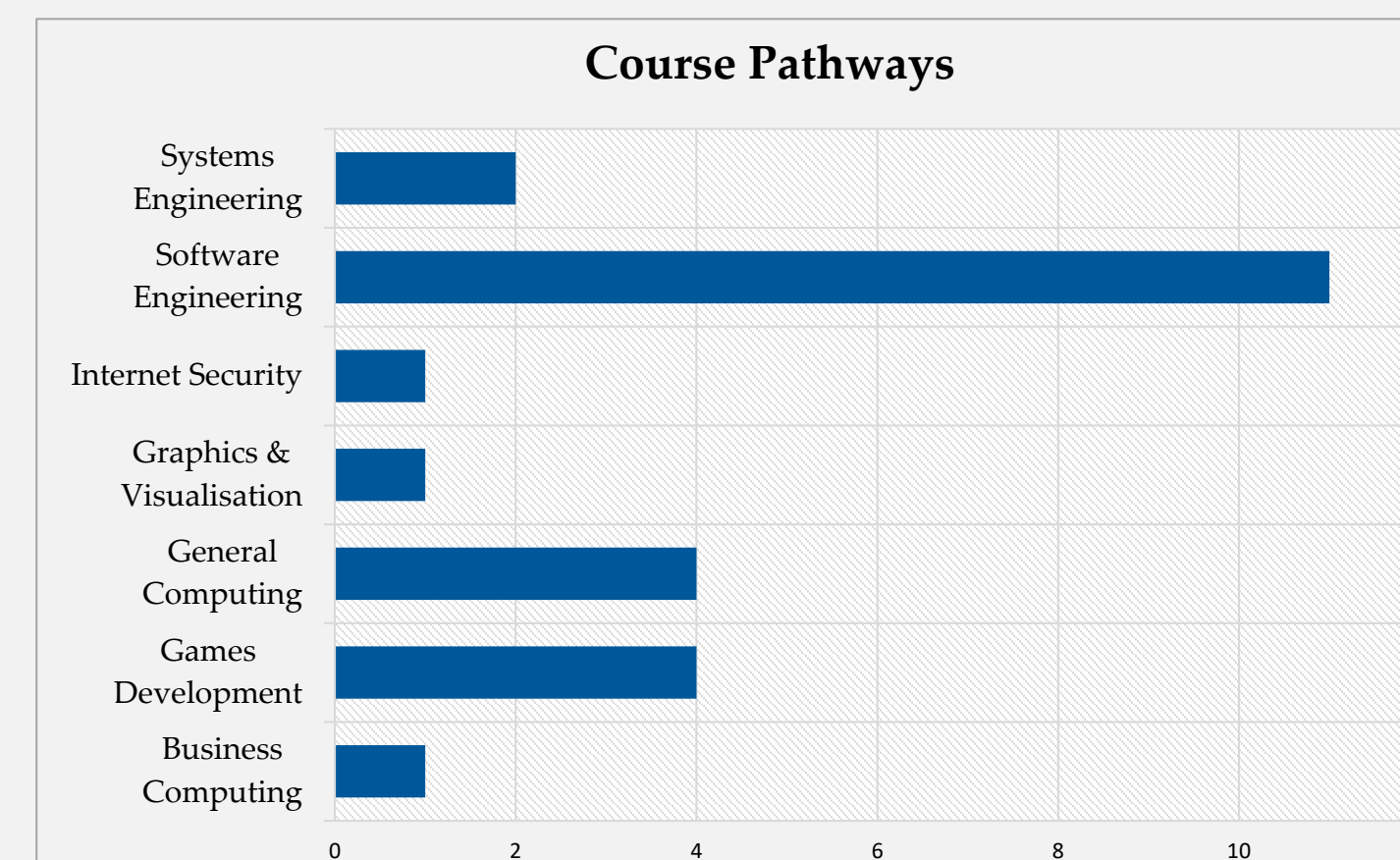
A prototype automated marking system was developed and evaluated..



Various students at the university on the undergraduate BSc Computing course were asked to test this system by using it for several mock assessments.

The students were given a user guide to help them through the full evaluation process. The developer was also available to give further assistance (if necessary).

## 3) Results



A total of 24 completed surveys were collected with a majority of positive feedback. Most of the participants found the system easy to use and useful, with helpful feedback provided to them and stated to likely use it again if given the chance.

## 4) Conclusion

Results show that automated marking systems are useful in marking formative student assessments, as well as improving their learning experience. Despite this success, the prototype was only able to mark TCA (Time-Constrained Assessment) short answer questions in Word documents. This is one of two regular computing assessments at the university, the other being TCL (Time-Constrained Laboratory) that includes coding questions/programs.