Introduction
Background
Analyses
Improving error messages
Conclusions
References

Usability of error messages for introductory students

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- Error messages are important tool for beginner programmers
- Unhelpful error messages make learning difficult

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Starting...

Starting...

Outline

- Background
- 2 Analyses of error messages
- Improving error messages
- 4 Conclusions

Outline

- Background
 - Type errors
 - Error Types
- 2 Analyses of error messages
- Improving error messages
- 4 Conclusions

Statically typed

Dynamically typed

Compiler errors

Runtime errors

Outline

- Background
- Analyses of error messages
 - Analysis of DrRacket IDE
 - Analysis of compiler errors
- Improving error messages
- 4 Conclusions

Racket programming language

IDEs and DrRacket

Study and methods

Results

C++ programming language

Study and methods

Results

Outline

- Background
- Analyses of error messages
- Improving error messages
 - Recommendations for improving IDE error messages
 - Analysis of syntax error enhancement
- 4 Conclusions



DrRacket recommendations
Syntax error enhancement

Some title

DrRacket recommendations
Syntax error enhancement

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Syntax error enhancement

Some title

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Results

Thanks!

Thank you for your time and attention!

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Questions?



References



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See the GECCO '09 paper for additional references.

