How to contribute to the STACK project

Chris Sangwin

School of Mathematics University of Edinburgh

April 2019





What is STACK?

STACK is a tool



What is STACK?

STACK is a tool

My goal is to create the very best "question type".

- For mathematics
- Based on real need.





Just choose one thing...



STACK documentation

A "static wiki".



STACK documentation

A "static wiki".

You have the documentation for the system on your server.



Especially guides NOT in English!



- Especially guides NOT in English!
- Example questions.





- Especially guides NOT in English!
- Example questions.
- Add tips & links.



- Especially guides NOT in English!
- Example questions.
- Add tips & links.

Please try to keep this all in one place.



- Especially guides NOT in English!
- Example questions.
- Add tips & links.

Please try to keep this all in one place. Github...



- Especially guides NOT in English!
- Example questions.
- Add tips & links.

Please try to keep this all in one place. Github...

(Git is complex, but worth learning.)



Please undertake basic research.

Is there a format effect between multi-choice and constructed response formats?



Please undertake basic research.

- Is there a format effect between multi-choice and constructed response formats?
- What quiz settings should I use? (Delayed feedback, multiple attempts?)





Please undertake basic research.

- Is there a format effect between multi-choice and constructed response formats?
- What quiz settings should I use? (Delayed feedback, multiple attempts?)
- Can we "automate" current school exams?





Please undertake basic research.

- Is there a format effect between multi-choice and constructed response formats?
- What quiz settings should I use? (Delayed feedback, multiple attempts?)
- Can we "automate" current school exams?
- How can we assess a complete mathematical argument?





Please undertake basic research.

- Is there a format effect between multi-choice and constructed response formats?
- What quiz settings should I use? (Delayed feedback, multiple attempts?)
- Can we "automate" current school exams?
- How can we assess a complete mathematical argument?

Github: .bib file of papers.



Community building

- ABACUS
- ILIAS
- MATRIC





Community building

- ABACUS
- ILIAS
- MATRIC

(and others....)



Community building

- ABACUS
- ILIAS
- MATRIC

(and others....)

Community building within a department/institution.



E.g. Binary numbers



E.g. Binary numbers
 Validation of "112" (Invalid/wrong?)





- E.g. Binary numbers
 Validation of "112" (Invalid/wrong?)
- Rules of significant figures





- E.g. Binary numbers
 Validation of "112" (Invalid/wrong?)
- Rules of significant figures
- Recent: require positive numbers.





- E.g. Binary numbers
 Validation of "112" (Invalid/wrong?)
- Rules of significant figures
- Recent: require positive numbers.

Git test cases....



Writing Code

Very welcome, but always difficult....



Apply for grants

Open source \neq cost free.



Apply for grants

Open source \neq cost free. Quality needs to be paid for.



Conclusion

Everyone can do something.



Conclusion

Everyone can do something. And this is very welcome.

