

# QE Automating Test Data for password validation

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## Procedure

As our app has strong child-protection needs, in discussion with developers, we agreed strong passwords would be a great first-level protection from potentially malicious individuals trying to access sensitive data.

We advised on strong password conditions, to avoid problems like brute-force attack; and also strongly suggested use of encryption.

JavaScript, and Jest were used for creating automated test data and running it through our developers isPasswordValid function, which under our advice, was abstracted into a function rather than appearing as a conditional test deeper inside existing code.

Initially tests were run on 1,000,000 randomly generated passwords. As the output proved too large for github to accept, this was reduced to 100,000 tests.

## Suggestions given to developers

1. To put password validation into a function to aid testing
2. To add support for the following special characters which appear on macBook keyboards:
  - a. `£-_=+[];'\"~/`
3. To correct a boundary value error, in which it was agreed passwords would be a minimum of 12 characters in length
4. To consider a maximum password length, e.g. 30 characters