

CS2103T Software Engineering
AY24/25, Y2S2
Practical Exam Cheatsheet

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December 3, 2025

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1 Phases

There are 3 phases: bug reporting, developer response, and tester response.

1.1 Bug Reporting

1.1.1 Product Testing (60 Minutes)

1.1.2 Evaluating Documents (30 Minutes)

1.1.3 Overall Evaluation (15 Minutes)

1.1.4 Trimming Bugs (after PE)

Go for accuracy.

1.2 Developer Response

<https://github.com/hackari/ped/issues>

<https://github.com/hackari/pe/issues>

1.3 Tester Response

2 Uniqueness

2.1 When should fields be unique

Depends greatly on context of app. A duplicate user identity should not be allowed, but multiple users with the same name may exist. (Same for other fields such as address, major, but maybe not phone number or email address)

2.2 Other issues with detecting duplicates

Sometimes names are capitalized, sometimes spaces are omitted, and it is probably impossible to tell if a full name and first name are referring to the same person. Do enough formatting (e.g. trimming white spaces, doing `.lower()`) to clear most cases.

3 Input Validation

If validation is unnecessarily restrictive, can flag as feature flaw under overzealous input validation.

3.1 Characters

- Input different languages: Japanese kanji, Chinese characters, diacritics, other glyphs. Has to make sense in context of input field
- Symbols: !@\$%^&*(). Has to make sense in context of input field
 - Slash: S/O, D/O
 - Period: Jr., Sr.
 - Comma: Some Chinese Singaporean names have these
 - Dash: Chang Ee-Chien (CS2107 Professor)
 - Plus: Phone country codes. Check each country's rules regarding phone number regulations
 - Brackets: Some phone numbers, some names
 - Numbers: For names: https://en.wikipedia.org/wiki/Jennifer_8._Lee

3.2 Length

These are usually cosmetic issues, especially when it only causes problems with UI. Can be considered malicious behaviour if you receive this bug.

- Different countries have different restrictions on legal name length
- Longest word in dictionary: Pneumonoultramicroscopicsilicovolcanoconiosis. UI should support at least up to this

Often depends on context. If you are only targeting Singaporean users, you may restrict personal phone numbers to only begin with 8 or 9 and have 8 digits. Telegram handles have their own restrictions too.

3.3 Email, URLs

Typically very hard to specify fully. Note that neither are case sensitive, and as such the corresponding find or search function should not be case sensitive either

Emails <https://github.com/nus-cs2103-AY2021S2/pe-dev-response/issues/3132>

URLs

3.4 Dates

Should be fine if you use the default Java library. Check for leap years, leap-leap years, leap-leap-leap years, etc.

4 Injection

5 Experience

5.1 UI

5.2 Error

6 User Guide

6.1 Alphanumeric

7 Developer Guide