Adapting UCD for Open Source Software Development

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Outline

• Introduction to UCD
• Challenges of applying UCD on FLOSS
• Case study: Moodle
• Ongoing project: gfx.tw
UCD: User-Centered Design
UCD: An iterative design process
A simple model

Why UCD?
Create Successful User Experience
To UX designers, success means creating products that are useful, usable, and desirable.

Product（產品）
Creating something for people you don’t know
Useful（有用）

Satisfactory in functionality
Usable（可用）

Whether the user can use the provided functions
Desirable（想用）

The user wants to own the product
I don’t care.
Usability: Extent to which a product can be used by specified users to achieve specified goals with **effectiveness**, **efficiency** and **satisfaction** in a specified context of use.
Usability: ISO09241-11

Effectiveness: 可以做得多好？
Usability: ISO09241-11

Efficiency: 可以做得多快？
Usability: ISO 09241-11

Satisfaction: 操作過程中有多爽/不爽？
Usability: Jacob Nielsen

Learnability（可學習性）：在初次接觸系統就能完成基本操作的容易程度。

Usability: Jacob Nielsen

Memorability（可記憶性）：經過一段時間沒用系統後，重新使用還能上手的容易程度。

Usability: Jacob Nielsen

Efficiency（效率）：學會使用系統後，能多快完成任務？
Usability: Jacob Nielsen

Errors（錯誤）：使用者犯錯的數量、錯誤的嚴重度、修正錯誤的容易程度。
Usability: Jacob Nielsen

Satisfaction（滿意度）：使用系統時的愉悦度。

Software development model with UCD

Why UCD in FLOSS?
World Domination
When FLOSS meets UCD
Scratch your own itches
Developer is user
Replace proprietary software
(End) users are missing
Floss projects with UX

- Mozilla Foundation
- GNOME
- OpenOffice.org
- KDE
- Drupal
- etc...
Outcomes
UI Design Guidelines
Usability evaluation report
User research report
Improved interaction design
Improved user interface design
And more...
Challenges
Code speaks louder than *
Entry barrier of tools to UX designers
Distributed development model
Limited resource
Most FLOSS projects are poor
UX designers can be free but accessing users is not
Solutions?
No best practice yet
Case study: Moodle usability

Moodle: The user’s experience, http://www.pilpi.net/software/moodle/
Began as a school project work: Quiz UI redesign

Moodle: The user’s experience by Olli Savolainen, http://www.pilpi.net/software/moodle/
Developed Moodle UI Guidelines

Moodle: The user's experience by Olli Savolainen, http://www.pilpi.net/software/moodle/
Usability specialist for Moodle

Moodle: The user's experience by Olli Savolainen, http://www.pilpi.net/software/moodle/
Ongoing project: gfx.tw
gfx.tw: a website for promoting Firefox.
Current status: an established website.
Problem: How to decide the priority of developing new features?
What we have done?
Talk to developers
Gathered statistics of website activity
Gathered feature requests
What next?
User research on gfx.tw contributors
References

- Usability Processes in Open Source Projects by David M Nichols and Michael B Twidale