About the Importance of UX in Open Source Projects

On the example of the openHAB software development project

Thomas Dietrich



20-Oct-17

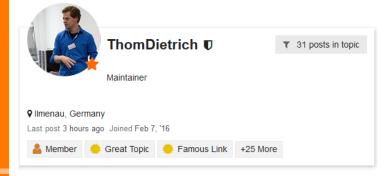
Thomas Dietrich

Professional Life

- Research fellow at TU Ilmenau (Germany), PhD student
- HW/SW systems co-design, evaluation and optimization







Spare-time Endeavors

- 54154636FollowersFollowingReposOrgsGists
- Home automation and tinkering enthusiast
- openHAB community moderator openHABian maintainer openHAB documentation lead

About the Importance of UX in Open Source Projects

The **SPIRIT** of science



User Experience (UX)

- Anticipated use
- Expected functionality and options
- Pre-Usage
 Expected outcome value
 - Effective and efficient execution of tasks
 - No limitation, confusion or malfunction
 - Processing of the usage experience
 - Development of an emotional bond
 - Reuse and recommendation in future

ILMENAU

sability

TECHNISCHE

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During Usage

Usage

Slide 3

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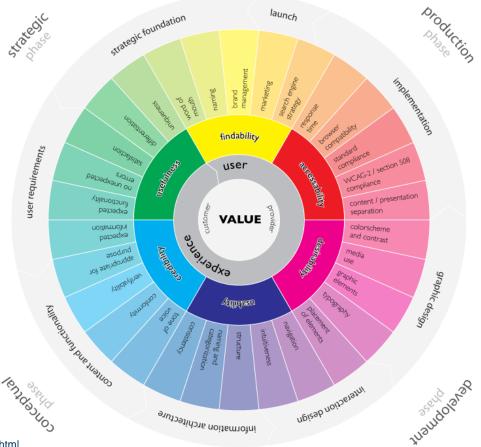
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User Experience

- Value is the goal for developers and users alike
- Value is accomplished through positive user experience
- User experience depends on many soft factors

Quick UX evaluation:

- Can I use it? (Usability)
- Should I use it? (Usefulness)
- Do I want to use it? (Desirability)



Source: https://userexperienceproject.blogspot.de/2007/04/user-experience-wheel.html

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Open Source Projects

Compare OSI "The Open Source Definition":

- Free Access and Redistribution
- Open and peaceful collaboration

Developer Expectation

- Access to source code
- Issue reporting and code contribution
- Opportunity to engage, influence and learn from collaboration

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About the Importance of UX in Open Source Projects





Importance of UX

- "The age of the consumer" products seen as servant, rather than tool
- The influence of Mobile: Intuitive slick apps and services for everyone
- User expectation is constantly rising
- User experience is key to success in all product sizes

About the Importance of UX in Open Source Projects





Importance of UX in Open Source Projects

Is open source software free from that shift?

- For developer-facing software the answer may be yes
- For user-facing software?

Developer Expectation

- Access to source code
- Issue reporting and code contribution
- Opportunity to engage, influence and learn from collaboration



No. Open source software is/should not be seen differently by non-tech-savvy users.

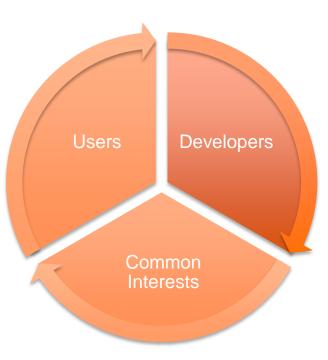
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Importance of UX in Open Source Projects

Should we care?

- Developers profit from feedback by users
- Users profit from improvements by developers
- Satisfied users attract new users
- Open source projects profit from active contributors
- Cooperate interests are often user-oriented



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Software development with UX in mind







Source: unknown

"The Cathedral and the Bazaar" - Eric Raymond, 1997

Open source project is a babbling bazaar of differing agendas and approaches

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Software development with UX in mind

"The product should target people whom [you] consider to be clueless newbies" - Peter Trudelle, 2002

Artifacts of UX for open source software



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openHAB UX evaluation

Until Q3 2017

- Stable and reliable core operation Kudos @developers
- Constant increase in device support Kudos @devs & @martinvw
- VS Code editor opportunity Kudos @kubawolanin
- Installation simplified and improved
- Documentation maturing
- Community reaches professional default
 - Tutorials & Examples section popular
- External perception increasing Kudos to many
- Documentation versioning missing
- Partly confusing graphical UIs
- Inconsistent graphical UIs
- Inconsistent logging (resp. feedback/monitoring)
- Gap between textual and graphical configuration

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Thanks for having me!

Thomas Dietrich



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