

Modelling UX and UI for human-machine interaction design for mobile applications*

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9 october 2021

Abstrakt

...1) I chose this theme because User Interface and Experience is very important in usage of an app, and good UX can achieve very good interaction effect, and hope it will help to get understanding how to build responsive and comfortable UX and UI for mobile apps.

2) Good UI and UX are in demand now as never before. "As the relationship between humans and technology continues to evolve, it's more important than ever for businesses to emphasize UX design in mobile app development initiatives. Truly understanding a product's user, researching to solve user pain-points, learning about latent behaviors and needs is the only way to ensure exceptional product performance". [2]

3) The problem is apps that have amazing functional and great possibilities in commercialization but because of bad UI or UX don't have or lose users. [1]

4) Simplest solution is to hire UI and UX designers to a project, that will do research and design for product, but I'm here to educate developers to understand steps to make good User Design and Interface and how it is made.

5) A lot of apps have amazing design, because they have done a lot of research, analysis and design on top of experimenting with it.

6) This article is about all stages of modelling and creating up-to-date design of an app from scratch and ways to make it better.

Future resources:

[5] [8] [6] [4] [7] [3]

Literatúra

[1] 9 bad ux practices in good products. <https://uxplanet.org/9-bad-uxes-in-good-products-73be5418a4c1>.

[2] The state of ux design in mobile app development. <https://clearbridgemobile.com/5-ways-to-conduct-better-user-experience-research/>.

*Predbežná verzia článku v predmete Metódy inžinierskej práce, ak. rok 2021/22, vedenie: Fedor Lehockí

- [3] Waterfall methodology ux. <https://www.conundrummedia.com/waterfall-methodology-ux/>.
- [4] Tedis Agolli, Lori Pollock, and James Clause. Investigating decreasing energy usage in mobile apps via indistinguishable color changes. In *2017 IEEE/ACM 4th International Conference on Mobile Software Engineering and Systems (MOBILESoft)*. IEEE, May 2017.
- [5] Xiangqian Fu. Mobile phone UI design principles in the design of human-machine interaction design. In *2010 IEEE 11th International Conference on Computer-Aided Industrial Design & Conceptual Design 1*. IEEE, 2010.
- [6] Yi Gao, Yang Luo, Daqing Chen, Haocheng Huang, Wei Dong, Mingyuan Xia, Xue Liu, and Jiajun Bu. Every pixel counts: Fine-grained UI rendering analysis for mobile applications. In *IEEE INFOCOM 2017 - IEEE Conference on Computer Communications*. IEEE, May 2017.
- [7] Kati Kuusinen and Tommi Mikkonen. On designing UX for mobile enterprise apps. In *2014 40th EUROMICRO Conference on Software Engineering and Advanced Applications*. IEEE, August 2014.
- [8] Ibrahim Anka Salihu, Rosziati Ibrahim, and Asmau Usman. A static-dynamic approach for UI model generation for mobile applications. In *2018 7th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO)*. IEEE, August 2018.