

**Analysis of the Entrance Questionnaire for the course
“Software development for start-up entrepreneurs”
at WHU, Vallendar, March/April 2015**

<http://softlang.wikidot.com/course:startup15>

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Table of Contents

Profiling based on knowledge.....	1
Conclusion regarding the course.....	1
Questions.....	2
Software development concepts.....	2
Self-assessment of software development skills.....	3
Learning objectives.....	4

Profiling based on knowledge

- 25 – filled-in questionnaires in total
- 6 – not any noteworthy prior knowledge of software development
- 9 – bits of prior knowledge of software development excl. programming though
- 6 – bits of prior knowledge of software development incl. bits of programming
- 4 – prior knowledge of software development incl. bits of web/app development

Conclusion regarding the course

The large majority wants to **acquire basic web-application and app developments skills** without though significant background in programming. Because of this tricky combination, TouchDevelop is chosen as the hands-on technology in the course since it is an easy to learn and to use technology that is also sufficient for rich web-app and app development including server/service aspects. More complicated mainstream technologies are nevertheless discussed.

There is a small number of students (i.e., 4) with existing knowledge in web-application or app development. These students may not be challenged by the course as much as they wish. They are still welcome to participate, if they wish so, in the hopes that they gain some deeper conceptual understanding and they appreciate the startup-oriented point of view for the course.

Questions

Software development concepts

Check the concepts that you could explain at a basic level!

- 4** Class inheritance
- 2** Higher-order function
- 6** Relational database
- 5** Model view controller
- 3** Exception handling
- 7** Authentication
- 15** Privacy policy
- 4** Event handling
- 6** Web application framework
- 17** Cloud computing
- 1** RESTful web service
- 5** Unified Modeling Language
- 4** Agile development
- 3** Build management
- 5** Version control
- 7** Software deployment
- 6** Scrum

Self-assessment of software development skills

Check the skills that you have!

- 6** Collaboration with software developers
- 11** Programming skills in programming language(s)
- 4** User-interface design and implementation
- 2** Development of distributed web-applications
- 2** Software testing
- 4** Version control
- 2** Software modeling
- 2** App development including release

List technologies for software development that you recently worked with!

AndroidStudio (1), Backbone.js (1), Brackets (2), C/C++ (2), Eclipse (1), Git (1), HTML/CSS (8), Java (4), JavaScript (4), Jekyll (1), Jira (1), jQuery (2), MySQL (1), NetBeans (1), Objective C (1), Oracle (1), Pascal (1), PHP (3), Python (2), Ruby (3), Rails (1), Sublime Text (1), VisualBasic (3), VisualStudio (1), WordPress (1), XAMPP (2), Xcode (1)

Learning objectives

Check the learning objectives that you consider compelling for the course at hand!

- 13** To acquire IT skills for your (potential) startup.
- 16** To understand how software developers think and work.
- 15** To be able to communicate with software developers effectively.
- 10** To be able to estimate complexity of software development efforts.
- 16** To acquire basic programming skills.
- 12** To improve current programming skills.
- 16** To acquire basic skills of web application development.
- 16** To acquire basic skills of “app” development for smart devices.
- 3** To figure out whether you may want to be a software developer.

Any objectives you would like to add?

- Hands on experience with standard tools such as GitHub and Heroku
- VisualBasic
- To understand how computer science influences business
- Model View Controller