# Software Development Project Management

(Detailed Overview)

### O. Scope Estimation / Value Proposition:

Define "selling points" of project. Analyze how the work is being done now and calculate potential approximate time/money savings.

Keep development circumstances in mind as well, such as availability of a data-warehouse, APIs etc.

Also, create Timesheet using the *Software Project Management – Time Estimation* document.

#### 1. Requirements Gathering:

Gather information on desired software behavior and end results. Documents to be made are:

- a) Software Requirements Specifications document (SRS)
- b) Preliminary Software Architecture Diagram

Only continue with the next Waterfall step after SRS document has been approved by all stakeholders (Manager, Internal End-Users). Revise SRS as often as needed.

Also, let users record their current workflow as screencaptures if applicable.

#### Prototyping (PoC):

Develop bare-bones, core functionality (no input checks etc.).

Present PoC to stakeholders and iterate development, adjust SRS until accurate and document current features/behavior. Also, create interaction videos and screenshots showcasing the way of interacting with the PoC. Reiterate until approved.

#### 3. Redesign Codebase:

Redesign Codebase and Software Architecture to ensure modularity, extensibility and fast test-setup.

#### 4. Testing:

Derive tests from Waterfall step 1 and flesh out all *details*. Document expected results in test documentation documents.

Test extensively and rewrite and create an Extended SRS document (ESRS) if need be.

#### 5. Integration Test:

Observe how the software integrates into the existing workflow. Software use is encouraged at this point, but not as a replacement for manual work. Add "software is unsafe for use" notice on every UI view possible.

Get screen recordings of software use and check if used as intended.

Approve this step yourself.

# 6. Release:

Write User Manual + Troubleshooting Guide + FAQ Write Installation Guide

Record video of installation and usage (crucial for fast onboarding of new team-members)

## 7. Maintenance:

Hotfixing of bugs, up-to-date changes if things change.

# 8. Feature Addition:

Is the new feature in the project scope or should it be separated into another Waterfall Procedure?

Example Chart for typical distribution of time-work:

