CS1 Task 2: se process

# Plan-driven, agile or combination

To decide which SE Process we’re going to use, we first collect pros and cons:

|  |  |
| --- | --- |
| **Agile process** | |
| **Pros** | **Cons** |
| Flexible | Customer needs to be available |
| Better scaleable | Customer may has new features every week |
| Permanent releases | More effort because more meetings, changing requirements |
| Work together with customer, more inputs |  |
| SW gets tested over and over again by customer |  |
| Not all requirements are known or/and available |  |

|  |  |
| --- | --- |
| **Plan-driven** | |
| **Pros** | **Cons** |
| Requirements are defined | Customer cannot request changes during development |
| Customer only needs to be available during defining processes at project start | Architecture is fixed by requirements |
| Customer has overview over milestones like testing and rollout. | Inflexible for slightly different customers (i.e. different user-interfaces, if not defined) |
|  | No frequently releases during development |

## Conclusion

Therefore we don’t know all requirements from the customer, we choose an agile process.

# Analysing various SE processes

|  |  |
| --- | --- |
| **XP** | |
| **Pros** | **Cons** |
| No extra documentation has to be written | Pair programming is a part of XP, and we’re not able to do so. |

|  |  |
| --- | --- |
| **RUP** | |
| **Pros** | **Cons** |
|  | RUP is designed for big companies with large projects |

|  |  |
| --- | --- |
| **Scrum** | |
| **Pros** | **Cons** |
| Daily meetings (before work) | Overview over whole project is difficult (keeping track of all tasks) |
| Estimate tasks together, assigned to a team member | Scrum-master shouldn’t be a team member (cannot avoid this one in our project) |
| Short sprint periods with releases (agile) |  |

## Decision

Based on the pros and cons our team decided to use Scrum as a process model.

# Design

## Process model

Because we have chosen Scrum, requirements have to be defined first.

## Activities

* Decide who scrum master is
* Define requirements
* Define stories for backlog
* Define tasks/subtasks for stories
* Decide which stories will be used in first sprint

## Relation among activities

All the activities have to be done in serial order. After first sprint there is a review and a planning meeting for sprint two.

## Involvement of stakeholder

* Customer
  + Intense communications until requirements are defined
  + After each sprint cycle, customer is involved in presentation and review
  + In the end there’s a final release and a project debriefing
* Development team
  + Scrum meetings (daily scrum, sprint planning meeting, sprint retrospective meeting)
  + Development itself