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Software Engineering and Design

Solutions to the given tasks

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1 Task 01

1.1 Target Users

- clinical staff
- doctors
- nurses
- health visitors
- receptionists
- medical records staff

1.2 Key Features

- clinical staff: agenda, medical record
 - doctors: descriptions, therapy records, instructions
 - nurses: therapy records, instructions
 - health visitors
- receptionists: agenda
- medical records staff: generating reports for management

1.3 Critical Success Factors

Definition: Terms for an element that are necessary for a project to achieve its mission.¹

- focus on mental health care
- data integrity
- intuition

¹en.wikipedia.org

1.4 Potential System Components and Architecture

- database
- interface usability
- user privileges management

2 Task 02

2.1 Comparison „plan-driven“vs. „agile“

2.1.1 Agile

positive points:

- working and reacting on the needs of the users
- very flexible if changes are necessary to the project (simpler and easier)
- is focused on the technical AND social problems of the project (customer involvement)
- agile developing fits better for small teams
- all members are involved in all parts (common knowledge)

negative point:

- no clear contact person on the developer side

2.1.2 Plan-driven

positive point:

- clear structure of the software allows easy task assigning (team)

negative points:

- very unflexible system if changes are necessary (customer)
- finding functions, which are also needed, after testing first release, will be expensive to implement (the client probably is not equal the user) (customer)
- very certain, that a new software is needed, at the moment, the old system gets delivered (to much other new functions needed) (customer)

2.1.3 Conclusion

Because of the previously seen slides, we came to the conclusion that we are going to use an agile development system. According to our knowledge at the moment we will use XtremeProgramming. For questions on the part of the customer, we nominated Mr. Rafael Kapp as the central contact person.

2.2 Process Model

goal	task / potential output	stakeholder
satisfy customer wishes	base for implementation	customer & team
define a deadline for the project	timeplan for tasks	customer & team
develop/integrate/testing	test-software	team
provide software	feedback	team & customer & users
applying changes based on feedback	optimized system	customer & team