Modern voluntary health-care-system

<Full title>

188.407: Management von Software Projekten

Group: 12

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Contents

1 Synopsis

The ultimate goal of the Modern Voluntary Health-Care System is to create and publish an e-health platform. This platform is based on a bonus malus system to give users an easy-understandable overview on how healthy they live.

Therefore the project is split in both a scientific and an engineering part. The scientific part aims at searching for technical methods to encourage people to live healthier. For this purpose we try to evaluate and answer some questions, such as:

- How can people, by technical means, be subconsciously forced to change their ways and daily routines?
- Is there a way to achieve practical improvements in peoples health by providing a playful approach to do so?
- Are those improvements comparable to e.g. consulting professionals such as nutritionists, health trainers or even doctors?

Case studies including user tests in the section of human-computer-interaction shall lead to a basis for developing a completely innovative and ground-breaking health-care system, which brings benefits to several different parties.

The engineering part is split into different phases. This leads to the creation of a usable, rudimentary product after a short time. Nevertheless, the vision is a long-term development. For each phase it is necessary to find different partners in economy and politics. The partners use the platform for advertisement and customer relationship. So the partners have benefits too.

Possible Partners are:

- Phase 1:
  - Supermarkets
  - Fitness-Centers
  - Restaurants
- Phase 2 - "Embedding to existing services":
  - Sport-Community with Tracking (Runtastic, RunKeeper, etc.)
  - other Sporttracking-Services (Pedometer, etc.)
- Phase 3 - "Health Organisations":
  - Insurances
  - WHO

When a user buys something in a shop of a partner he can register the product within an app. In the system the purchases get anonymised, saved and analyzed based on a transparent score-schema.

The user can exchange the scores for gifts like coupons for healthy shopping at a partners store. Moreover the platform can be used for rankings (which of the user lives most healthy?) and lotteries. Partners are able to interact with the user over the platform. So they can advertise

new promotions. This promotion can be used by the user for getting additional scores.

The goals of the platform:

- **Health of the user**: People are getting more sensible for health-care. So they get forced to live in a healthier way. The healthcare-system is very expensive. So the whole government will have a benefit from this platform and more healthier people.
- **Advertisement for the partners**: For the partners the platform offers a chance to advertise their promotions. Furthermore they have the chance to give coupons to the users. With this coupon they can interact with the customer. One possible effect is a gain in customer loyalty. The customer is getting animated to buy more at partners stores. Therefore partners have to refinance a part of the platform.
- **Benefits for users**: Users should be given discounts when they buy some healthy things at partners stores. This could be achieved by giving coupons to users from a lottery in the platform.

2 Introduction and problem description

- *Length: 2-3 pages*
- **Why?**
- Introduction
- Context
- What is the current situation?
- What is the open/unresolved problem or opportunity?
- Why is it a problem?
- What is unknown?
- What could be improved?
- Explanation of fundamental terms and basic definitions.

3 Project goals and deliverables

- *Length: 1-2 pages*
- What is the goal of the project?
- Research questions
  - What are the hypotheses that are to be investigated?
  - Main hypothesis & sub hypotheses
- Which results should be achieved with the project?
  - What will be known afterwards that is not known now?
  - What will be created that does not exist now?
- Non-goals (What will not be part of the project? What will not be done?)

4 Scientific relevance and innovative aspects

- *Length: 1-2 pages*
- Why is the project scientifically interesting?
- Did others point out that this is an open question?
- What are the innovative aspects that make it interesting?
- How could the project break new ground scientifically?
- To what extent are the objectives ambitious and beyond the state of the art (e.g. novel concepts and approaches or development across disciplines)?

5 State of the art / current knowledge

- *Length: 2-5 pages*
- What results and approaches have already been presented in this or related areas?
- Relation to the international scientific work in the field (international status of the research)
- Description and critical discussion of related scientific work

6 Method

- *Length: 2-5 pages*
- **How?**
- How should the expected results be achieved?
- What method(s) will be applied? (e.g., empirical study, user-centered design, prototype implementation,...)
- Description of the methods.
- Justifications for chosen methods.

7 Detailed description of the workpackages

- *Length: 2-4 pages*
- Structuring the project into self-contained parts.
- Additional verbal descriptions.
- Work packages
  - title
  - goal(s)
  - description
  - expected results
  - responsible person(s)
  - dependencies

8 Time plan (Gantt chart)

- *Length: 1-2 pages*
- Realistic estimation of schedule based on workpackages.
- Including milestones (not only when but also what is to be achieved for each milestone).
- Generation of a Gantt chart. (Including phases, milestones, buffer times, critical areas, etc.)

9 Human resources / team

- *Length: 1-2 pages*
- Description of the team that is needed to carry out the project. (For the execution phase of the project, not the planning phase.)
- How many people?
- To what extent are individual members needed?
- What knowledge, skills, and experiences are needed for each member?
- Demonstrate that the members will be able to carry out the project successfully.
- Work structure
  - Who will lead the project?
  - How do they work together?
  - Management and coordination
    - What communication structures will be established? (e.g., mailing list, blog, CMS, CVS, ...)
    - How often will meetings take place? (Who will participate?)
    - How will the work be documented?
    - How will information be stored and shared?
- Cooperations
  - Will external cooperators be part of the project? (e.g., other research institutions or companies)
  - What is their role?
  - Why are they needed?

10 Costs

- *Length: 2-3 pages*
- Rough estimation of cost in form of calculation (table(s)) + descriptive text.
- Justification for the personnel and non-personnel costs (equipment, material, travel and other costs)
- An Excel template is provided as supplementary material to support budgeting.
- Personnel costs
  - Justification for the personnel to be assigned to the project (type of position(s), description of nature of work, length and extent of involvement in the project)
  - The application should include all persons who will be required for the proposed project (project lead, researchers, developers, advisory board, etc.). The available legal categories of employment are contracts of employment for full- or part-time employees (DV) and reimbursement for work on an hourly basis (GB). In addition, a part-time contract of employment (DV 50%, "studentische Mitarbeiter") may be requested for people who have not yet completed a Master or Diploma program (Diplom) in the relevant subject.
  - The justification of the requested personnel should contain:
    - description of type of work;
    - extent of involvement (part-time contracts are permitted).
  - Exact numbers of employment categories can be found on the FWF Website (http://www.fwf.ac.at/de/projects/personalkostensaetze.html)
- Equipment costs
  - Indicate reasons for equipment costs. The "scientific equipment" category includes instruments, system components, costs for the use of software required by the project and other durable goods provided the cost per item (including VAT) exceeds EUR 1,500.00.
- Material costs
  - This category encompasses consumables and smaller pieces of equipment where the cost per item is below EUR 1,500.00 including VAT. The calculation of requested material costs should be justified with reference to the schedule, work plan and experimental plan. Experience with previous projects should be taken into account.
- Travel costs
  - Funding may be requested for the costs of project-specific travel and accommodation, field work, expeditions, etc. Applicants are to provide a detailed travel (cost) plan broken down by project participant. For brief stays, the calculation of the travel and accommodation costs should be based on the federal regulations governing travel costs (RGV). The RGV rates governing Austria and abroad may be found in the FAQs on the FWF Website (http://www.fwf.ac.at/de/faq/reisegebuehrenvorschrift.html). For longer stays an appropriate and comprehensible cost plan should be prepared.
- Other costs
  - Independent contracts for work and services (costs for work of clearly defined scope and content assigned to individuals, provided that this is scientifically justifiable and economical)
  - Costs that cannot be included under personnel, equipment, material or travel costs, such as:
    - reimbursement of costs towards or for the use of research facilities, e.g. of large-scale research facilities (project-specific 'equipment time'). Applicants should obtain and submit multiple offers;
    - costs for project-specific work carried out outside the applicant's research institution (e.g. for analysis work performed elsewhere, for interviews, for sample collection, for preparation of thin slices etc.). Applicants should obtain and submit multiple offers;
    - honoraria for test persons;

11 Expected implications and risks

- *Length: 1-2 pages*
- Importance of the expected results for the discipline
  - To what extent does the proposed research address important challenges?
- Importance of the expected results for other areas
- What are possible risks of the project and how can they be alleviated?
  - What factors could lead to a failure of the project?
  - Which factors or persons could support the project and increase the chance for success?
  - What if important team members leave the project?

12 Ethical considerations & security issues

- *Length: 1-2 pages*
- Provide a brief explanation of the ethical issue involved and how it will be dealt with appropriately.
- Are there any security-sensitive issues that apply to your proposal?

References

Abbreviations

MSWP Management von Software Projekten

WP Work Package