

Assignment 1

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1. In your opinion, what are the good points and what are the bad points of agile methods? Give an example of a (type of) application for which agile development would not be suitable. (Examples from your own experience are welcome!)

Solution:

In my opinion, the main good points are:

- Direct contact with the customer in order to keep the design up to date;
- It prevents the project from getting stuck at any point. Because if you are not progressing on a certain task, the weekly meetings will help you fix the problem;
- It is possible to detect errors and improve the process periodically.

And the main bad ones, are:

- Need to specify a team for a certain project;
- It may not work very well in public companies, where there is a certain difficulty in hiring;
- it can have a lot of wasted time in meetings.

An example I have in my work is that being a public company, sometimes it is difficult to separate a team for a specific project, because as the hiring of new employees is done through public tender, it is not easy to manage the manpower, and many times we have to change areas to meet specific demands.

2. Imagine that you need to develop an online dating application that can be used on smartphones. You are meeting the client and you are trying to show them that you understood what they want.

Write down the following:

- 10 functional requirements;
- 3 non-functional requirements;
- One verifiable non-functional requirement (see slide 17 in lecture 3).

Can you imagine any domain-specific requirement? If yes, write it down. If not, explain why you believe such requirements are not needed in this case.

Solution:**Functional requirements:**

1. The user shall be able to create and edit his profile.
2. The user shall be able to narrow down the people he is interested in.
3. The user shall be able to delete your profile.
4. The user must be able to block another user.
5. The system should suggest people with similar profiles.
6. The system must know the user's location.
7. The system must store the user profiles in a single database.
8. The system must be able to detect improper photos.
9. The system must be able to detect inappropriate language.
10. Each user can only have one profile.

Non-functional requirements:

1. All user data must be encrypted and not disclosed to third parties.
2. There should be the possibility to include other regions in the application in a simple way.
3. The system must have a test environment and a production environment. Where in the test environment, developers can test new features and predict problems.

verifiable non-functional requirement:

1. It should not take more than 5s for up to 50 new profiles to appear for the user.

The application is in the realm of social networking. Where it should be possible to have interaction between users and sometimes create or delete new connections.

3. Find two examples of user interfaces from the real world: one which you consider overall as "(very) good" and one which you consider overall as "bad" (in terms of user interface). The examples can be web applications, smartphone apps, desktop software programs etc.

For each of the two examples describe:

- The purpose and the intended users;
- The good/bad points (in terms of menus, labeling, user help facilities, response time etc.);
- How well they respect (or not) the golden rules of user interface design.

For the "bad" example, describe how you would change the system so that it has an "improved" user interface. Please include screenshots/pictures of the systems you chose.

Solution:

- **Good one:** It is a mobile app from a Brazilian bank. All the main functions that the application proposes to perform, such as: bank transfers, payments and services are intuitive to do. In Figure 1 the app's main screen, where it is possible to see the good layout of the buttons.

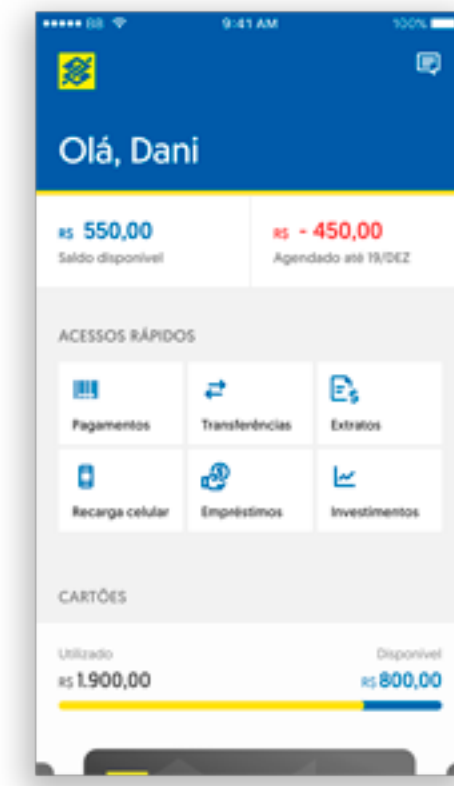


Figure 1: <https://www.bb.com.br/docs/pub/inst/img/ACESSOSRAPIDOS.png>

The intended users are very diverse, ranging from young to old.

- **Bad one:** The website of a private university in Brazil, where you can access the courses you are enrolled in. The proposal is to be able to access the content of the courses, however, it is not easy to find the courses because it is not possible to organize them by semester. the estimated public is the university's students. Its is possible see the page in Figure 2.

The screenshot shows the 'Cursos' (Courses) page of the Cruzeiro do Sul University website. The interface is in Portuguese. On the left is a dark sidebar with navigation links: 'Página da Instituição', 'Alexandre Victor Sa...', 'Linha do tempo', 'Cursos' (highlighted), 'Organizações', 'Calendário', 'Mensagens' (99+), 'Notas', 'Ferramentas', and 'Fazer logoff'. At the bottom of the sidebar are links for 'Privacidade' and 'Termos'. The main content area is titled 'Cursos' and features a search bar with the text 'Pesquise seus cursos', a filter dropdown set to 'Todos os cursos', and a '25 itens por página' selector. Below the search bar, the section '20221' lists four courses, each with a star icon for favorites and a help icon. The courses are: 1. 'ADMINISTRAÇÃO DE RECURSOS HUMANOS - 80h_Turma_01_062022 (4.0)', 2. 'CIÊNCIAS ECONÔMICAS E ADMINISTRATIVAS - 80h_Turma_01_032022 (4.0)', 3. 'CONHECIMENTOS GERAIS - 20221', and 4. 'DIVERSIDADE ÉTNICO-CULTURAL - 80h_Turma_06_062022 (4.0)'. Each course entry includes a link to 'Válos Instrutores' and a 'Mais informações' dropdown. A 'Catálogo do curso' icon is visible in the top right corner.

Figure 2

As an improvement, my suggestion would be to organize the courses by semester on the home page, and not put them all at once.