



How the customer explained it



How the Project Leader understood it



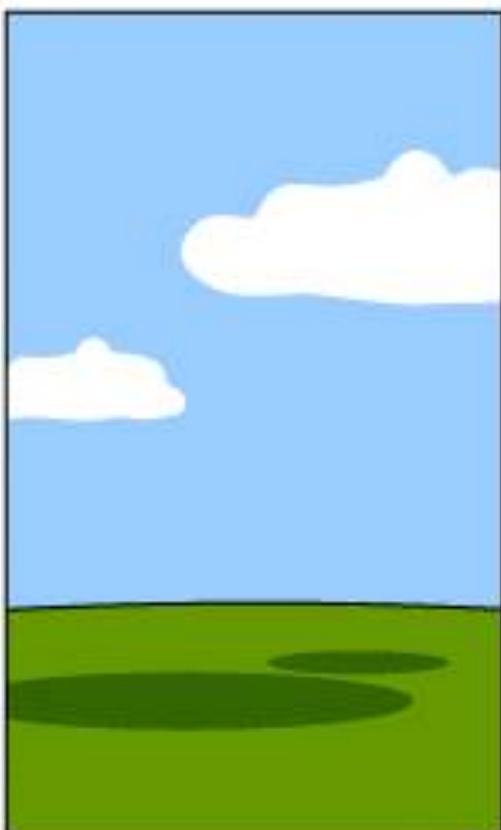
How the Analyst designed it



How the Programmer wrote it



How the Business Consultant described it



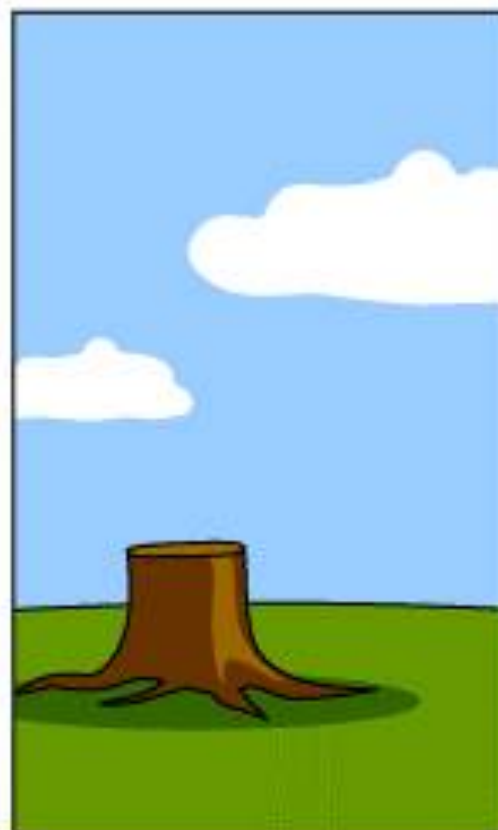
How the project was documented



What operations installed



How the customer was billed



How it was supported



What the customer really needed

Requirements

Thierry Sans

Software Requirement in Agile Development

- **Personas**

knowing who the users are in terms of behaviours and goals towards the software

- **User Stories**

identifying the software features that will match the users' behaviours and goals

Personas

What are personas?

- archetypical users of a system
 - representation of users goals and behaviors
- ➡ Personas are used for product design and marketing

Why defining personas?

- effective software is designed for specific people
- help understand requirements
- separate market segments
- facilitate communication within team members

How to write personas?

- based on data collected on real (potential) users

What information do you find in a persona

- fictional name
- demographics : gender, age, education, ethnicity and family status
- job title and responsibilities
- physical, social and technology environment
- goals when using the system
- attitude towards technology, domain, etc.
- technical skills

Exercises

- Analyzing personas
`personas-exercise.pdf`
- Writing personas
`grademywork.pdf`

User stories

Principles of Agile Development

- Agile sets a **fast and incremental development**

Step 1 : build the first feature, validate it, release it

Step 2 : build the second feature ...

and so on

| user story ~ | feature ~ | software release

Definition

User story : a high-level definition of a requirement, an elemental task that a user can do with the software

"As persona (a role), I want something, so that benefit"

this part could be optional

Refining user stories

Users Stories must be **refined to include more details**

As a shopper, I would like to have a receipt for my purchase

Could become

As Jerry (a budget shopper), I would like to have a receipt for my purchase that lists the price and any discounts, so that I have a record of my purchases. The receipt should also have a date and the name and price of all articles purchased.

Breaking down user stories

Some user stories are too big by themselves and should be broken down into several, more specific, user stories

As a store manager, I want to offer items on sale for a reduced price for a limited time, so that I can increase traffic in the store. The price reductions can be a percentage reduction or a straight reduction to a lower price.

Could become

- *As Bina (a store manager), I want to offer a flat rate discount on items between Dec 26 and Dec 31.*
- *As Bina (a store manager), I want to offer a percentage discount to senior citizens on Tuesdays.*

Dealing with conflictual user stories

- *As a customer, I want to have a help button that summons a cashier if I'm having difficulty.*
- *As a retailer, I don't want to have a help button that summons a cashier because it wastes employee time.*

Identify bad user stories

- *As a user, I want the application to do **everything that it is supposed to do***
- *As a user, I want the application to work on IOS*
- *As a user, I want the application to work well*
- *As a user, I want the application UI to be user friendly*

Identifying "epic" user stories

As a student, I want to be able type my solution online, test it and submit it so that it can be graded and the score sent back

Triaging user stories

Defining what should build first in terms of importance of the feature

- *As Alice (student), I want to see my grade for a given course*
- *As Alice (student), I want to see the grade distribution for a given course*

Sometimes, you need to think about user stories dependencies and their corresponding software release

- *As Alice (a student), I want to browse the course catalogue*
- *As Bob (an administrator), I want to add new courses to the course catalogue*

Exercises

- Analyzing user stories
`personas-exercise.pdf`
- Writing user stories
`grademywork.pdf`