

Project Management

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AMOS B02

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Project Management

- The AMOS Project directive is **simplify, simplify, simplify!**
 - One tool for product and process management (Google Sheets)
 - Other tools for software development (GitHub, Travis-CI, etc.)
 - Teams may add additional tools at their discretion (and own risk)
- Project management in The AMOS Project includes
 - Product management (product owner role)
 - Development task allocation (software developer role)
 - Release management (review and release manager role)
 - Process improvement (Scrum master role)
- Project management is performed using Google Sheets
 - Planning documents template: <http://goo.gl/Brc0Q>
 - Example artifacts: <http://goo.gl/FRfym>
- Please share your copy with team coach

Planning Document Tabs

| # | Category | Artifact Name | Artifact Purpose |
|----|----------|---------------------|--|
| 1 | General | Project Data | Collects basic project data |
| 2 | General | Project Team | Shows project team and static roles |
| 3 | General | Role Assignments | Tracks dynamic role assignment |
| 4 | Product | Product Vision | Provides product and project vision |
| 5 | Product | Product Glossary | Provides core terminology of project |
| 6 | Project | Release Plan | Provides mid-term and final release plan |
| 7 | Project | Burn-down Chart | Provides Scrum burn-down chart |
| 8 | Project | Development Speed | Provides Scrum development speed chart |
| 9 | Product | Product Backlog | Shows open functionality, prioritized |
| 10 | Project | Sprint Backlog | Shows current work backlog |
| 11 | Product | Feature Archive | Collects finished functionality |
| 12 | Process | Impediments Backlog | Tracks process problems and solutions |
| 13 | Process | Definition-of-Done | Provides decision criteria for “done” |
| 14 | Product | Documentation | Provides additional documentation of product |
| 15 | Product | Bill of materials | Lists all third-party components |
| 16 | ... | ... | ... |

1. General: Project Data 1 / 2

| Project Name | Flowers / Wahlzeit |
|----------------------------|---|
| | |
| This document | ... |
| | |
| Production system (if any) | https://wahlzeit.com/flowers |
| Test system (if any) | ... |
| | |
| Github repository | https://github.com/dirkriehle/wahlzeit/ |
| Travis-CI dashboard | |
| | |
| Additional materials | ... |
| | |
| Example | ... |

1. General: Project Data 2 / 2

- Definition
 - A collection of relevant (starting point) links
- Purpose
 - Simplify navigation
- Production and system
 - Deployment scenarios depend on project but please try hard
- Github repository
 - Required
- Travis-CI dashboard
 - Required

2. General: Project Team 1 / 2

| Last Name | First Name | GitID | Email Address |
|-----------|------------|------------|--------------------|
| Riehle | Dirk | dirkriehle | dirk.riehle@fau.de |
| ... | ... | ... | ... |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

2. General: Project Team 2 / 2

- Definition
 - The list of team members and their contact information
- Purpose
 - Make it easy to contact individuals or the whole team
- Pragmatics
 - Feel free to adjust with other information, e.g. Skype ID

3. General: Role Assignments 1 / 2

| # | Start Date | End Date | Product Owner | Software Developer | Scrum Master | Release Manager |
|----|------------|------------|---------------|--------------------|--------------|-----------------|
| 1 | 2011-04-12 | 2011-04-19 | John Doe | Everyone else | Jane Doe | Bill Jones |
| 2 | 2011-04-19 | 2011-04-26 | Dirk Riehle | Everyone else | John Doe | Jane Doe |
| 3 | 2011-04-26 | ... | ... | ... | | |
| 4 | ... | ... | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

3. General: Role Assignments 2 / 2

- Definition
 - A week-by-week assignment of roles to team members
- Purpose
 - Provide plan and history of role assignments so everyone knows their job
- Pragmatics
 - Please plan out the project at start of course
 - Feel free to add roles beyond the four required ones

4. Product: Vision and Mission 1 / 2

Product Vision

The Flowers social network helps flower enthusiasts world-wide to connect with each other and enjoy following their favorite hobby online. Centered on showing and rating favorite flower photos, it inspires growing and presenting ever more beautiful flowers. With a highly engaged user community, Flowers is the best place for producers and sellers of gardening supply to reach out to customers and engage with them. Such engagement involves understanding flower enthusiasts' needs around gardening supplies and selling to them.

Project Mission

The mission of this 2011 AMOS project is to create an MVP for Wahlzeit with the Flowers extension. Core functionality will be showing and rating photos, basic user management, case management, and minimal system administration.

4. Product: Vision and Mission 2 / 2

- Definition of product vision
 - A product vision communicates
 - The main purpose and core functionality of the product
 - The value the main stakeholders receive
 - It is inspiring, timeless, focused and the final arbiter
- Definition of project mission
 - A project mission summarizes
 - What the project wants to achieve
 - Within the project time-frame
- Purpose
 - Explain project succinctly
 - Serve as a guiding star when prioritizing features
- Pragmatics
 - Product vision and project mission should be short

5. Product: Glossary 1 / 2

| Term | Definition |
|-------------------------|--|
| Average Photo Rating | Synonym for overall photo rating. |
| Individual Photo Rating | A numerical value 1..10 that a visitor applies to a photo. |
| Overall Photo Rating | A photo rating is a numerical value that represents the community's ranking of the photo in question. Over time, a photo accumulates a large number of individual ratings. The overall rating is the average of those individual ratings. |
| Photo | A photo is a flower photo that has been uploaded (and is owned) by a system user. A photo has a status that determines its accessibility. |
| Photo Sharing Policy | Flowers has a photo sharing policy. The policy determines what an acceptable photo is. Photos are unacceptable if they are unrelated to the Flower's purpose (i.e. off-topic), violate someone's copyright, or are offensive by judgement of the community and a moderator |
| Photo status | A photo may be visible to the world or invisible (by choice of owner). Photos may be flagged for violating Flowers' photo sharing policies. Flagged photos are not visible and show up in a moderator queue, where the moderator may unflag them or set them to moderated. |
| Photo Tag | A photo tag is a label that has been applied to a photo by its owner. They have no further semantics beyond the actual text. |
| Single Photo Rating | Synonym for individual photo rating. |
| System Administrator | A system administrator is a system moderator with additional administration functionality. He or she can reboot the system. |
| System Moderator | A system moderator is a system user with access to additional moderation functionality. He or she can moderate photos. |
| System User | A system user is a (human) user of the system who has a user account and is logged into that account. A user can upload and maintain photos. |
| System Visitor | A system visitor is (human) user of the system. A visitor has access to all public functionality that does not require a login. |
| Tag | Shorthand for photo tag. |
| User | Shorthand for system user. |

5. Product: Glossary 2 / 2

- Definition
 - Is an alphabetically ordered list of terms and their definition
- Purpose
 - Provide key domain terminology (shared vocabulary) of project
 - Is a simplified form of a domain model accessible to everyone
- Term
 - A (possibly qualified) noun determining the concept to be defined
- Term definition
 - The definition of the referenced term
 - A base definition is a declarative statement of the form X is a X'
 - Other forms of definitions are synonyms, shorthands, etc.

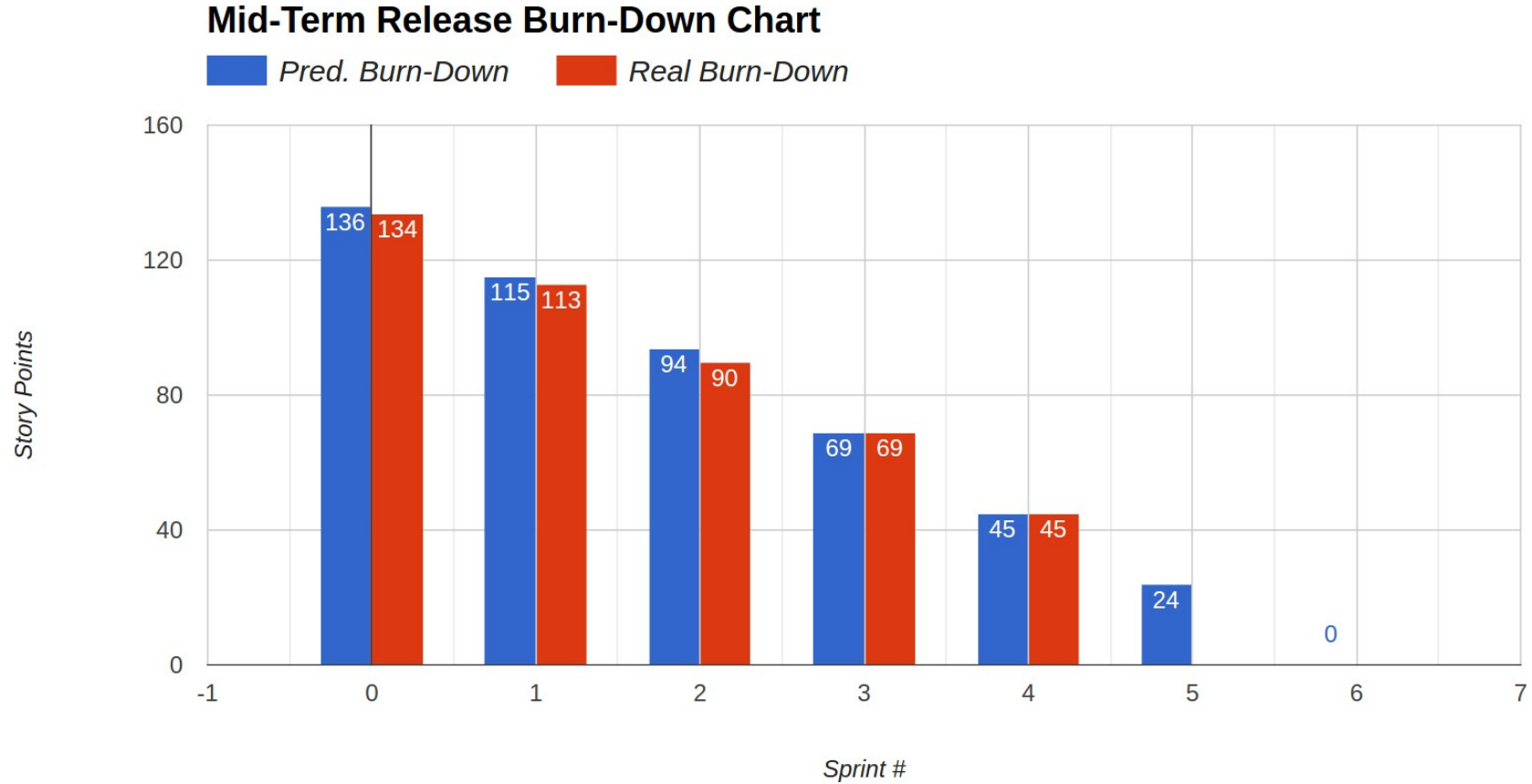
6. Product: Release Plan 1 / 2

| | | | | | | | |
|----------------|-----------------------------|---------------------|-------------------|------------------------|------------------|-----------------------|-------------------|
| Release | Mid-term | | | | | | |
| No Sprints | 6 | | | | | | |
| Due Date | 12.04.11 | | | | | | |
| | | | | | | | |
| Sprint | Sprint Theme | User Stories | Pred. Size | Pred. Burn-Down | Real Size | Real Burn-Down | Dev. Speed |
| 0 | | | | 136 | | 134 | |
| 1 | Basic Visitor Self-Admin | 1, 2, 3, 4 | 21 | 115 | 21 | 113 | 21 |
| 2 | Basic User Self-Admin | 5, 6, 7, 8 | 21 | 94 | 23 | 90 | 22 |
| 3 | Basic Photo Management | 9, 10, 11, 12 | 25 | 69 | 21 | 69 | 22 |
| 4 | Basic Visitor Photo Rating | 13, 14, 15 | 24 | 45 | 24 | 45 | 22 |
| 5 | Basic System Administration | 16, 17, 18, 19 | 21 | 24 | | | 18 |
| 6 | Basic Complaint System | 20, 21, 22, 23 | 24 | 0 | | | 15 |
| Total | | | 136 | | 89 | | |
| | | | | | | | |
| Release | Final | | | | | | |
| No Sprints | 6 | | | | | | |
| Due Date | 24.05.11 | | | | | | |
| | | | | | | | |
| Sprint | Sprint Theme | User Stories | Pred. Size | Pred. Burn-Down | Real Size | Real Burn-Down | Dev. Speed |
| 6 | | | | 155 | | | |
| 7 | Viral Marketing Features | 24, 25, 26, 27 | 25 | 130 | | | |
| 8 | Advanced Photo Management | 28, 29, 30, 31, 32 | 25 | 105 | | | |
| 9 | Basic Community Forums | 33, 34, 35, 36 | 23 | 82 | | | |
| 10 | Advanced System Management | 37, 38, 39 | 27 | 55 | | | |
| 11 | Advanced Photo Tagging | 40, 41, 42, 43 | 28 | 27 | | | |
| 12 | Search Engine Optimization | 44, 45, 46 | 27 | 0 | | | |
| Total | | | 155 | | 0 | | |

6. Product: Release Plan 2 / 2

- Definition
 - A prioritized list of features for a product release
- Purpose
 - To predict the content of the upcoming product release
- Pragmatics
 - Has been estimated by developers, validated by historic data
 - Is a living document, that is, gets adjusted after each sprint

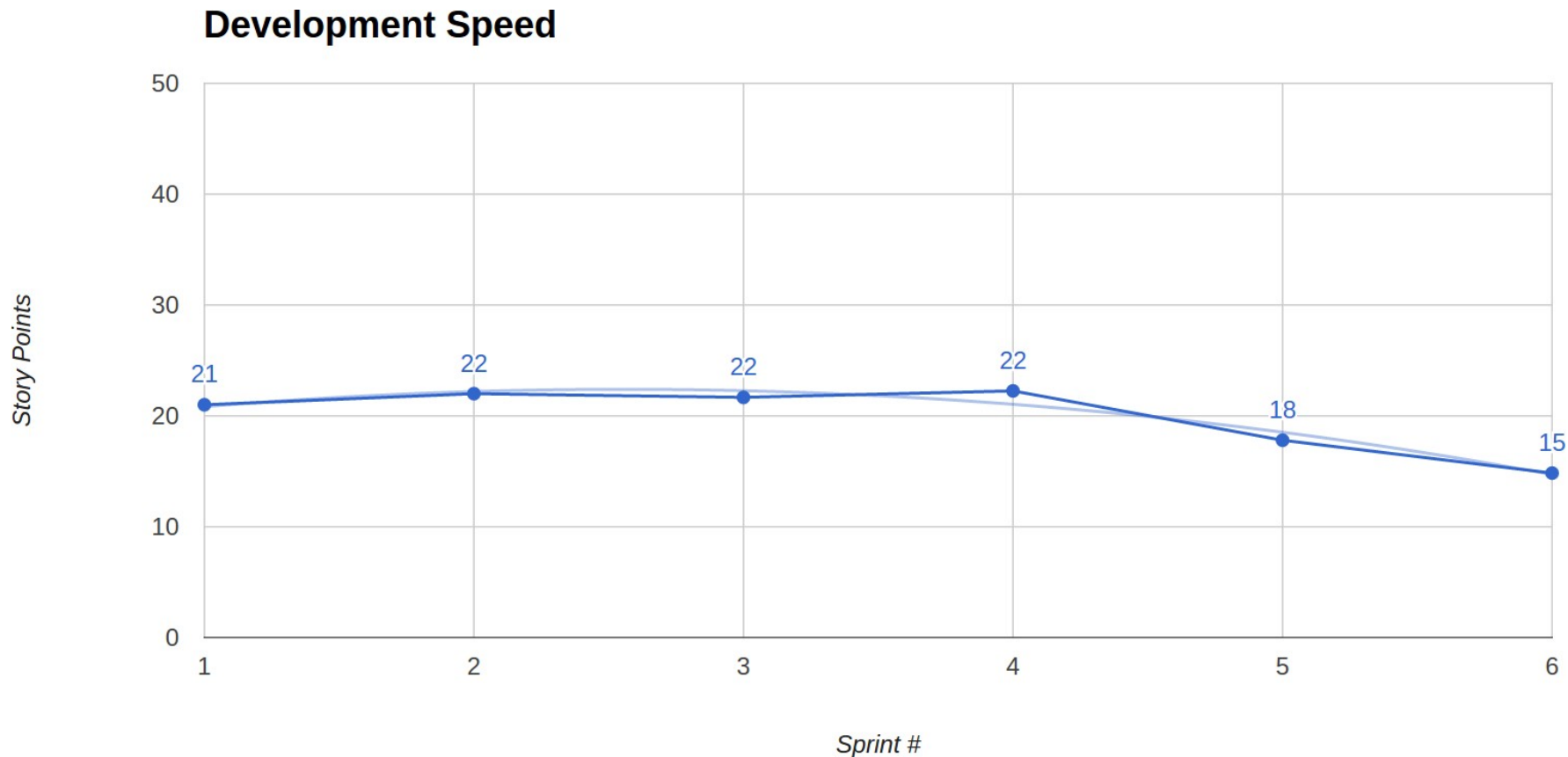
7. Product: Burn-down Chart 1 / 2



7. Product: Burn-down Chart 2 / 2

- Definition
 - A visualization of the progress towards the next product release
 - Contrasts actual progress with originally estimated progress
- Purpose
 - Make visible what cannot be easily seen in the product release plan

8. Product: Development Speed Chart 1 / 2



8. Product: Development Speed Chart 2 / 2

- Definition
 - A visualization of the develop development speed of the development team

9. Product: Product Backlog 1 / 2

| ID | Theme | Short Name | Item Description | Acceptance Criteria | Pred. Size |
|----|--------------------------|------------------------------|--|---|------------|
| 13 | Photo Showing and Rating | Show Next Photo | As a visitor, I am presented with a random photo when I go to the website | Repeated visits to the site provide different photos | 8 |
| 14 | Photo Showing and Rating | Rate Photo and Proceed | As a visitor, I can rate a photo with a numerical value 1-10; after rating another photo is shown | The rating is stored and an average value is computed | 8 |
| 15 | Photo Showing and Rating | Show or Hide Photo Caption | As a visitor, I am presented with a photo caption, which I can expand to full photo data | A first click shows me the photo data, a second click hides it again; repeat | 8 |
| 16 | System Administration | Create Default Admin | As a sysadmin, I can create a default application administrator from the command line | After running the command, a default "admin" account with default password "dingdong" exists and can be used | 5 |
| 17 | System Administration | Startup and Shutdown Scripts | As a sysadmin, I can startup and shutdown the service from the command line | Three consecutive startup and shutdown command line invocations leave the system in a consistent state | 3 |
| 18 | System Administration | Reboot and Shutdown UI | As an administrator, I can reboot or shutdown the service using a graphical UI | The command is only available to the administrator role and shuts down the system to a clean restartable state | 5 |
| 19 | System Administration | Cold Backup and Restore | As a sysadmin, I can backup all data to files and reload it fresh while the system is down, using the command line | Running restore after backup recreates the same identical system | 8 |
| 20 | User Feedback | Flag Photo | As a user, I can flag a photo as inappropriate or copyright violation; a flagged photo becomes invisible immediately | The flagged photo cannot be viewed by anyone any longer but the owning user or an administrator | 8 |
| 21 | User Feedback | View Flagged Photo Queue | As an administrator, I can view all flagged photos, ordered by time of flagging | The list shows all previously flagged photos | 8 |
| 21 | User Feedback | Review Flagged Photo | As an administrator, I can review a flagged photo and unflag it or take it offline | After unflagging, the photo is viewable again; after taking it offline, the user receives an email notification | 5 |

9. Product: Product Backlog 2 / 2

- Definition
 - A prioritized list of needed features, bugs-to-fix, and refactorings
 - Features are created by POs, bugs derive from Github issues
- Purpose
 - To know at any time what will come up next
 - To serve as a living document for the PO for requirements
- Pragmatics
 - The higher the priority of a backlog entry, the closer to the top
 - Priorities are defined by order in backlog, not broad categories
 - All high-priority backlog entry provide initial guess on size
 - Highest priority backlog entries should be specified well
 - Further down the backlog, entries can be more vaguely defined

10. Product: Sprint Backlog 1 / 2

| ID | Theme | Short Name | Item Description | Acceptance Criteria | Size | Resp. |
|----|------------------|------------------------|--|---|------|-------------|
| 9 | Photo Management | Browse Photo Portfolio | As a user, I can browse my collection of uploaded photos, i.e. my photo portfolio, complemented by basic information | I am provided with a browseable list of all my photos to select one from | 8 | Dirk |
| 10 | Photo Management | Select Photo | As a user, I can select any one of my photos and have it shown to me, including any added information | After selecting one of my photos I'm presented with a screen that shows the photo and its information | 5 | Jane |
| 11 | Photo Management | Change Photo Data | As a user, I can select any of my photos and change the information available for it | After changing the photo's information, the change becomes effective immediately | 3 | Joe |
| 12 | Photo Management | Delete Photo | As a user, I can select any photo from my portfolio and have it deleted | After deleting the photo, it will not be shown any longer to any user | 5 | Bill |

10. Product: Sprint Backlog 2 / 2

- Definition
 - The current sprint's workload as committed to by team
- Purpose
 - To know at any time what to do in the current sprint
 - To serve for task allocation between developers
- Pragmatics
 - Sprint backlog entries are copied over from product backlog
 - Every sprint backlog entry comes with an estimated size
 - After successful implementation, they move to feature archive

11. Product: Feature Archive 1 / 2

| ID | Sprint | Theme | Short Name | Item Description | Acceptance Criteria | Pred. Size | Real Size | Resp. |
|----|--------|--------------------|----------------------|---|--|------------|-----------|-------|
| 1 | 1 | Visitor Self-Admin | Register | As a guest, I can register on Flowers for free, to become a user and get access to user functionality | After registration, my newly created account is available right away and I can login | 8 | 8 | Dirk |
| 1 | 2 | Visitor Self-Admin | Login | As a guest, I can login using my previously created user account data to get access to user functionality | After logging in, I have access to user functionality | 5 | 5 | John |
| 1 | 3 | Visitor Self-Admin | Logout | As a logged-in user, I can logout from Flowers to free up the computer for some other person | After logging out, I have lost access to user functionality and can only regain it by logging in again | 3 | 3 | Jane |
| 1 | 4 | Visitor Self-Admin | Reset Password | As a visitor, I can request to be sent an email with a link to a page that lets me create a new password | Upon having received the email, I can use the linked-to page to create a new password | 5 | 5 | Jane |
| 2 | 5 | User Self-Admin | Prompt Basic Profile | As a user, I am asked to enter basic profile data upon every login, if it doesn't yet exist | I am asked for basic data upon every login; after providing it once, I never get this dialog again | 5 | 5 | Bill |
| 2 | 6 | User Self-Admin | Change Basic Profile | As a user, I can change my basic profile data, which at a minimum involves real name and email address | After changing my basic profile data, any changes are active right away | 5 | 5 | Dirk |
| 2 | 7 | User Self-Admin | Change Password | As a user, I can change my password; having to double-enter my password protects me from mistakes | After changing my password, the change has become active right away | 3 | 5 | John |
| 2 | 8 | Photo Management | Upload Photo | As a user, I can upload a new photo and add information to it; meta-data is extracted from the photo | After uploading a new photo, I can find it in my photo portfolio | 8 | 8 | Bill |

11. Product: Feature Archive 2 / 2

- Definition
 - A list of features that have been implemented
 - All features contain the original size estimation
 - All features contain an after-the-fact size estimation
- Purpose
 - To serve as a (most basic) list of product functionalities
 - To allow lookup of history of development

12. Process: Impediments Backlog 1 / 2

| ID | Sprint | Impediment | Status | Resolution |
|----|--------|-------------------------------|----------|--|
| 1 | 2 | Lack of punctuality | Resolved | Increased price for tardiness to self-baked cake |
| 2 | 4 | Unresponsive industry partner | In-work | Engaged with teaching team |
| | | | | |
| | | | | |

12. Process: Impediments Backlog 2 / 2

- Definition
 - A list of current and historic impediments to process
- Purpose
 - To know at any time the current impediments
 - To see whether any impediments keep recurring
- Pragmatics
 - It names the Scrum master responsible for resolution
 - It provides the solution found, if any

13. Process: Definition-of-Done 1 / 2

| Release DoD | |
|-------------|--|
| | |
| 1 | Software passes all integration and system tests successfully |
| 2 | ... |
| ... | ... |
| | |
| Sprint DoD | |
| | |
| 1 | There are no open bugs of severity level critical or important |
| 2 | ... |
| .. | ... |
| | |
| Feature DoD | |
| | |
| 1 | Feature test coverage is demonstrated at above 50% |
| 2 | ... |
| ... | ... |
| | |
| | |
| | |

13. Process: Definition-of-Done 2 / 2

- Definition
 - Is a check list of decision criteria to determine status of “done”
- Purpose
 - To be consistent about what “done” means
- Pragmatics
 - Definitions of “done” (DoD) require team consensus
 - There are many such decisions, hence many DoDs needed
 - At a minimum, at the proper time, the team should have a
 - DoD for sprint release
 - DoD for product release

14. Product: Documentation 1 / 2

All documentation can be found in the top-level folder documentation in the project repository

14. Product: Documentation 2 / 2

- Definition
 - The product documentation (where to find what)

15. Product: Bill of Materials 1 / 2

| Open source bill-of-materials | | |
|-------------------------------|----------------|--------|
| | | |
| 1 | apache-commons | 2.0 |
| 2 | zlib | 1.2.11 |
| 3 | ... | ... |
| ... | | |
| | | |
| Other third-party components | | |
| | | |
| None | | |
| | | |
| | | |

15. Product: Bill of Materials 2 / 2

- Definition
 - A list items (“materials”) included in the project
 - Items typically mean open source libraries
- Purpose
 - To maintain an overview of “what’s the box”
- Pragmatics
 - Please lists all third-party components used by the product
 - List only those used directly; no need to recursively unpack
 - In case of open source components, also list their license

Thank you! Questions?

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