Project Management

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AMOS B02

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	...	...	...

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	…

- 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

- CI dashboard
  - Optional

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

- Definition
  - The list of team members and their contact information

- Purpose
  - Make it easy to contact inviduals or the whole team

- Pragmatics
  - Feel free to adjust with other information, e.g. Skype ID

#	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						

- 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

- **Use the same week numbers as in the Course schedule**
  - **Week 1 starts with the first lecture**
  - **Week 1 also starts the first sprint**

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.

- 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

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*
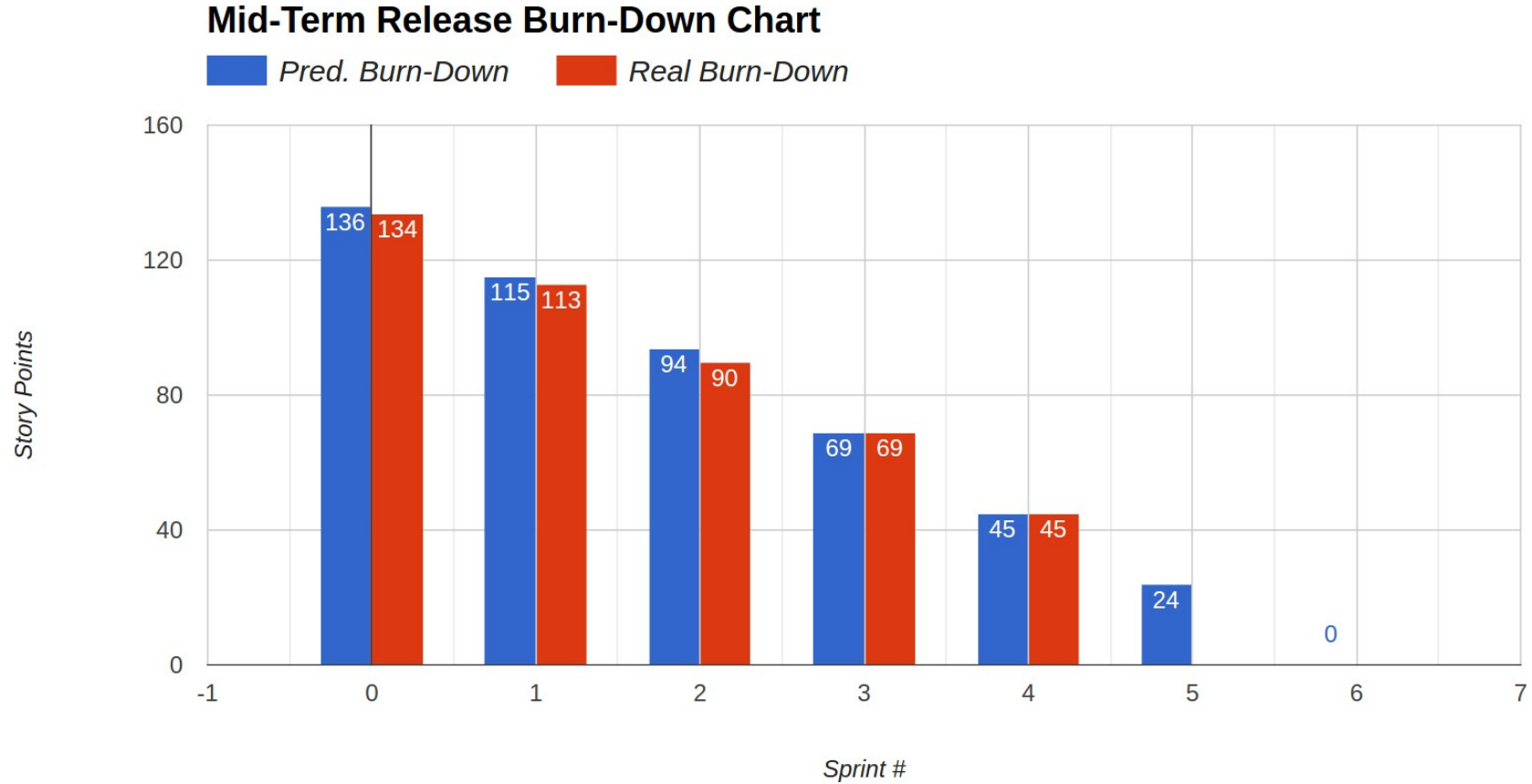 - Other forms of definitions are synonyms, shorthands, etc.

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		

- 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
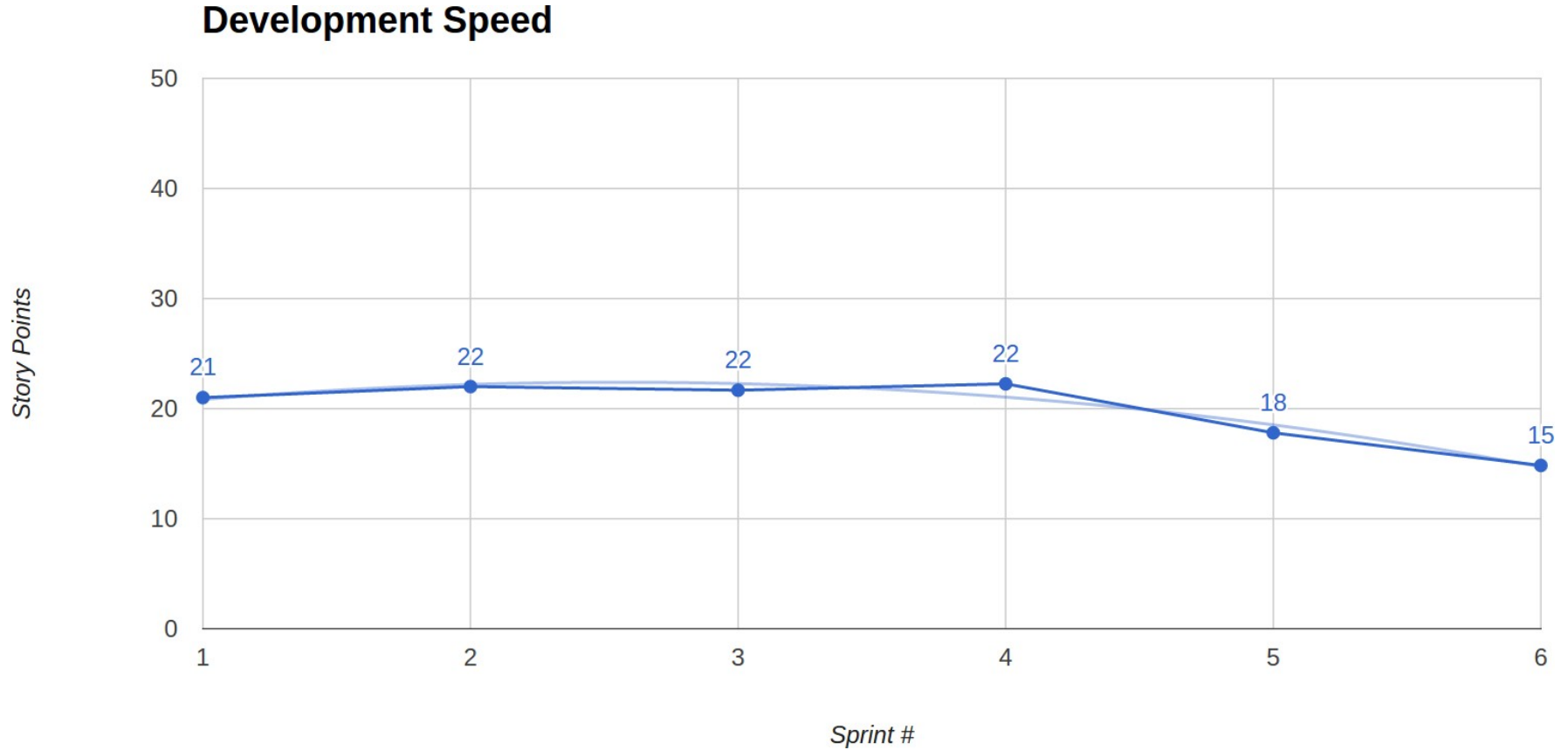 - Is a living document, that is, gets adjusted after each sprint

Mid-Term Release Burn-Down Chart

- Pred. Burn-Down
- Real Burn-Down

- 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

Development Speed

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

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 a 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

- 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

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**

- 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

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

- 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

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

- 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

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	...
...	...

- 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

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

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

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 libaries

- 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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- Contributions
  - None yet