Projekt **Jake**

Jake Specification

Kurzzusammenfassung:
This document contains the SRS, technical and UI specification for Jake 1.0

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Nr	Datum	Autor	Änderung
1	2008-11-09	Simon Wallner	document created

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Teil I

Software Requirements Specification

1.1   Introduction

Jake is an application that simplifies sharing files in small project groups. It's main focus lies on sharing and replication of files and notes over a network.

1.1.1   Core Audience

Jakes core audience are people with minimal to medium IT training, who are comfortable working with internet and email applications.

1.1.2   Example Usage Scenario

A project group of 6-12 project members that shares about 5-100 files (ordinary office files mainly). All project members connected to the internet most of the time, while they are working. Usually only one person works on a file at one time, therefore merging conflicts are rare.

This model scenario may be a small corporate project, or a student project. It is especially useful for projects in distributed teams like architects working in Vienna and Abu Dhabi.

1.2   Terms and Definitions

This sections contains terms and definitions that are used in this document. If you are already familiar with Jake, you might want to skip this section for now.

Jake The Name of the application this software requirements specification is written for.

project A project is the core unit of Jake. It consists of *project members*, *project files* and *project notes.*

project member A project member may share project files with other project members within a project. He/she is uniquely identified by its *user ID.*

user A user of jake, who is not part of a certain project.

project files Files that are shared within a project.

project folder Every project is bind to one local *project folder* in which the project files are stored.

local files Files that reside in the project folder but are not shared.

project notes Besides files, a project may contain notes. Notes are associated to the whole project (in contrary to a note to a file)

local notes Notes that are not shared.

file system The service provided by the operating system to move, copy or remove files and folders

affecting the project A certain action is said to be *affecting the project* if the action is visible to other project members. If Alice modifies a file, this action does not affect the project (i.e no one knows that Alice made a modification) unless Alice decides to announce it.

announce Mark a file or note as "ready to be distributed".

announce message When announcing a file or note a *announce message* may be specified to provide additional information about the changes to the file, or the file itself.

member list The member list is a set(unordered, unique) of *project members* a user explicitly trusts.

explicit trust relation the *explicit trust relation* ($Alice \sim Bob$) holds true, if *Alice* explicitly trusts *Bob*. It is a neither transitive ($\exists a, b, c : a \sim b \wedge b \sim c \nRightarrow a \sim c$) nor symmetric ($\exists a, b : a \sim b \nRightarrow b \sim a$) relation.

transitive trust relation The *transitive trust relation*($Alice \sim^+ Bob$) holds true, if there exists a directed *path* ($Alice \sim^+ Bob :\Leftrightarrow \exists a_1, a_2, .., a_i : Alice \sim a_1 \sim .. \sim a_i \sim Bob$, i.e. the transitive hull) from *Alice* to *Bob*. It is a transitive ($a \sim^+ b \wedge b \sim^+ c \Rightarrow a \sim^+ c$) but not symmetric ($\exists a, b : a \sim^+ b \wedge b \nsim^+ a$) relation.

neighborhood of project member a_0 All project members that a_0 explicit trusts: $\{a_i : a_0 \sim_i^a\}$

directed project graph All project members along with their explicit trust relations form the directed project graph

web of trust in a web of trust each member of the web trusts each other member.

peer A *peer* is the abstraction of the client associated to a specific project, seen from a networking perspective.

Besides the above definitions this section uses keywords proposed in RFC 2119[1]. In general, every part of this specification MUST be fulfilled except the parts that are explicitly marked as OPTIONAL or similar.

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[1] http://www.ietf.org/rfc/rfc2119.txt

1.3 Functional Requirements

1.3.1 Manage Projects

Single Instance with many Projects

At any time, there MUST NOT be more than one instance of Jake running per user session. Within this single instance several projects are supported. The number of concurrent *projects* MAY be limited. Every project MUST have its own *project folder*. Files MUST only be associated with one project, therefore sharing a file with multiple projects is not supported.

If Jake is started, the last application state is restored (as far as one exists), i.e. the last opened projects are reopened on start.

Creating a new Project

In order to create a new project, the user specifies a *project folder* and a *project name*. All existing files in the project folder become *local files*. No *user ID* and network connection is required to create a new project but the project must be bound to a *user ID* in order to invite other users and start sharing files and notes.

Deleting a project

Projects may be deleted within Jake. If a project is deleted all files relating to this project MUST be either deleted from the file system or moved to the OS trash folder, whereas the latter method SHOULD be preferred. The user MUST be prompted to review the deletion and be either approve or decline it. The consequences of this operation MUST be clearly conveyed to the user.

1.3.2 Manage Files

In Jake all files (i.e. *local* and project files) are organized hierarchically in folders. New folders may be created within Jake. Files and folders may be moved within the project folder or be deleted from it. If a file/folder is deleted from the project folder, it MAY either be moved to the OS trash or to a dedicated trash folder inside the project folder. One of this options MUST be chosen for a concrete implementation. If the file/folder is moved to a dedicated trash folder, this trash folder MUST be hidden from the user within Jake, but the user MUST BE able to examine its contents, restore files/folders and empty it.

Files may be added to the project either by moving them into the project folder via the file system or by *importing* them in Jake. These files are *local files* as long as they are not announced.

Changes in the *project folder* MUST be reflected in the application within an acceptable latency.

Local files MAY violate filename constraints (length, illegal characters), *project files* MUST NOT. If a filename violates filename contraints the file name MAY be altered in order to conform with the constraints. This SHOULD happen transparently and obvious to the user (i.e. Übung 1.pdf → Uebung_1.pdf). If filenames are changed, the user MUST be prompted to review the change. He/she may either approve or decline the change.

Batch operations MUST be provided where applicable.

Cached files from the operating system (e.g. `.DS_STORE`, `thumbs.db`, `__MACOSX`, `.trash` etc.) MUST NOT be part of a project and are therefore hidden from the user.

Announcing Files/Notes

Only *project files/notes* are shared among the *project members*. In order to contribute a *local file/note* to the project it must be *announced*.

Changes or new files/notes do not affect the project unless announced.

If the user announces a file/note (or changes to it) he/she may specify an *announce message* to provide additional informations for other project members about the modification/new file.

In order to delete a file/note from the project the delete operation is announced to the other project members.

1.3.3   Manage Notes

In Jake, a *note* is associated generally with a project. Both *local* and *project notes* exist, where *local notes* are notes that are not shared. They are NOT hierarchically ordered and reside in one common location within Jake. Notes are only accessible through Jake. Notes may be created, displayed, modified and deleted. A note consists only of a *body*. The first line of a note SHOULD be emphasized. The length of the note MAY be limited.

Announcing notes works analogous to files.

1.3.4   Tags

Files have a *set* (in the mathematical sense; no duplicate elements, unordered) of *tags*. Tags for notes are OPTIONAL. A *tag* is a string. Constraints (length, no spaces, illegal characters, etc.) MAY be enforced on tags. Changes to tags immediately *affect the project*, and therefore don't need to be announced.

1.3.5   Project Members and the Web of Trust

All project members are equal, no one has special rights or stands above others.

All project members in a project along with their *explicit trust relation* form the directed *project graph*. The *explicit trust relations* are represented by the edges and the project members are represented by the nodes.

Each project member has a set of project members that he explicitly trusts. It is called the *member list*.

the web of trust section will be reformulated shortly

In general the *project graph* is not complete.

Adding and Removing Users

A user is added to the project if an existing project member explicitly trusts him/her. A user remains a project member as long as at least one project member explicitly trusts this user.

Removing project members is not easy. A project member may only be completely removed from a project if he/she is not connected to the project graph anymore. This means, no other user has an *explicit trust relation* to that user ($\nexists a_i : a_i \sim^+ a_0$)

For Example: *Alice* $\sim^+$ *Bob*, *Bob* $\sim^+$ *Eve* and *Alice* $\sim^+$ *Eve*. If Alice removes Eve from her *member list* Eve still remains a project member, as long as there is at least one project member that trusts Eve ($\exists a_i : a_i \sim^+ Eve$). Users SHOULD be made aware of the web of trust and its implications.

Global Member List

Jake MUST provide a *global member list*. This list contains all project members of the project, i.e. all project members that are connected to the project member who creates the list. This list MUST be created with best effort, it is not reliable. This fact MUST be clearly communicated to the user.

Add/Remove Member Alert

A project member SHOULD be alerted if someone in the project adds or removes a member. Best effort, non reliable.

1.3.6   Auto Add/Remove

A project member may set an *auto add/remove flag* at every project member in his/her member list (written as $\sim^\pm$). Lets make things clear with a short example: *Alice* $\sim^\pm$ *Bob*. If Bob adds Carol Alice automatically adds Carol as well. If Bob removes Carol from his list Alice does that as well. The following problem may occur when removing project members: *Alice* $\sim^\pm$ *Bob*, *Alice* $\sim^\pm$ *Carol*, *Bob* $\sim$ *Eve* and *Carol* $\sim$ *Eve*. Now Bob removes Eve from his member list. In that case Alice does not remove Eve.

Auto add is always stronger than *auto remove*. Alice does not remove Eve unless Carol removes Eve and therefore no *auto add* relations persist.

The *auto add/remove relation* ($a \sim^\pm b$) is transitive ($a \sim^\pm b \wedge b \sim^\pm c \Rightarrow a \sim^\pm c$) but not symmetric ($a \sim^\pm b \nRightarrow b \sim^\pm a$)

1.3.7   Sharing and Synchronization

A peer only communicates with other peers from the same project. A peer MUST only download files/notes from peers that are in its *member list*. A peer MUST know which files are available from the peers in the *member list* and offer this list to the user.

Folders are not synchronized explicitly. The user may not synchronize empty folders. Folders are only synchronized if they are needed by the contained files. (e.g if a file `foo/bar.txt` is created and synchronized, the folder `foo/` will be created to contain the file `bar.txt`. Empty folders MUST NOT be deleted automatically.

A peer SHOULD always deliver any file/note to another peer in the project if requested. It MUST provide information about the available files to other peers from the project. It MUST NOT deliver any data to peers that are not in the project (at the time of the request, as far as the peer knows)

The peer MUST always offer the user to download the latest available version of a file. New versions of notes MUST always be downloaded as soon as they become available.

Deleting Files and Notes

If a user announces a delete operation for a file/note every peer that receives the delete operation MUST delete the file/note. Conflicts may occur in the process of deleting files, folders and notes.

A *synchronization conflict* may occur under the following condition: A project member modifies a project file. If another version of the same file becomes available that is newer (timestamp) then the base version of the modified file (i.e the version of the file before it was modified) a conflict occurs.

Conflict Resolution

Both versions of the conflictuous file and additional information (last edit, last edited by, size, etc) are offered to the user. The user may examine both files and perform either one of the following actions:

- Choose the locally modified file and overwrite the remote version.

- Choose the remote version and discard the local changes by updating the local file to the remote version.

- open both files and merge the files manually, then try to announce the merged file. A new conflict may occur.

- postpone the conflict resolution to a later time. The process of conflict resolution may be restarted at any time.

Additionally both con conflicting version may be saved to a different location.

Resolving conflicts in notes is limited to choosing one version or resolving the conflict later.

Soft Lock

A file or note may be *soft locked*. A *soft lock* consists of a *locking message*. This *locking message* MAY be limited in length. Every user may append, modify or delete a soft lock.

Whenever an action is to be performed on a locked file or note that may change the file/note, the user MUST be prompted to review this operation and either decline or approve it. The locking message MUST be displayed along the prompt.

As with everything, the propagation of the soft lock can only be done with best effort.

1.3.8 Application Start

Jake may be started without any project loaded and without being logged in. In this case, new projects may be created, the user may create a new jabber account, the user may login into the network or receive invitations to projects (requires login)

1.3.9 Pause/Resume a Project

Projects may be paused and resumed. If a project is paused, changes MUST NOT be synchronized with other project members, changes to the project folder in the file system MUST NOT be monitored. The user may not work on a paused projects in Jake (no adding, no changing, no announcing, no browsing, no whatever...). The user may delete a paused project.

Paused projects may be resumed at any time.

1.3.10 Open/Close a Project

Projects may be opened and closed. As in other applications a project must be opened in order work on it. Jake is not aware of closed projects, as if the project never existed.

1.3.11 log in/out

The user may log on/off to/from the network service (XMPP in that case).

1.3.12 Searching

Jake MUST provide appropriate means for searching files, notes, tags, project members.

1.3.13 i18n

Jake SHOULD provide appropriate means to support internationalization, in terms of a user language specific interface.

1.3.14   Preferences

Project specific preferences are stored along the corresponding project. Global preferences MUST be stored in one global file/location. User credentials MUST NOT be stored along the project so that the user might not give away his/her credentials with the project accidentally.

Preference files SHOULD be hidden from the user.

1.3.15   Creating a new Jabber Account

Jake MUST provide sufficient means to create new Jabber accounts from within the application.

1.3.16   General Constraints

Jake MAY enforce additional constraints on strings if necessary. Though these constraints SHOULD affect the user as little as possible (replacing illegal characters in file names with '_' is ok, only allowing `[a-zA-Z]` is not!)

Exceptions

Jake MUST be able to tackle exceptions like `not enough disk space`, `no read/write access to file`, missing config files and things alike in a convenient manner.

1.3.17   Error Messages

Jakes error messages should be simple, clear and easy to understand. Problems should be described from a user's perspective and SHOULD NOT use terms and models that lie outside the user context (i.e. "Network Error: could not open port 666"). If the user wants additional technical information it SHOULD be presented along the error message.

1.3.18   Log Files

Jake MUST provide log files for files, notes and the whole project. A Log file is a chronological list that contains operations performed, the user who caused the operations, when the operation happened and which parts of the project have been influenced. It MAY also contain additional information. Compilation of a log is best effort, non reliable.

1.4   Change History

This section contains changes to this document. Each change must be described detailedly.

Rev. 1, 2008-11-9, Simon Wallner

created document

Rev. 2, 2008-11-15, Simon Wallner

Updated the SRS according the results of the SRS feedback meeting. Some parts are still unclear

Rev. 3, 2008-11-19, Simon Wallner

Updated the SRS according the last meetings and feedback. The following has changed:

- tags for notes are now OPTIONAL

- added option for saving conflicting files to another location

- fixed some typos

- clarified the definition of *transitive trust relation*, changed the notation from $\sim^*$ to $\sim^+$. It might be more easily mistaken for the *auto add/remove relation* but it is now consistent with the transitive hull syntax used in wikipedia.

- note MUST always be downloaded if available, aka autopull notes

Some points are still unclear:

- Version conflicts with deleted files are not specified.

- MUST delete operations always be announced immediately/automatically? aka auto announce delete?

- the web of trust section is still unclear and I'm not sure if we should keep it or drop it.

- user switching: what happens if the user logs off from the network? Will all associated projects be closed? How about working offline?

Rev. 4, 2008-11-24, Simon Wallner

Updated SRS according to a mail from Johannes: Folders are not synchronized directly anymore. It is not supported to share empty folders. Folder may not be tagged.

Teil II

Use Cases

1.5   General

1.5.1   Launch Jake

ID	GEN-01
Name	Launch Jake
Status	Unfinished (and rather strange), I'll add extension point/alternative path (saved session) later
Goal/Rationale	Start Jake when it is not currently running
Summary	In order to use Jake, the application has to be launched first.
Preconditions	A running operating system with Jake installed and all JVM and library prerequisites met
Triggers	Launching Jake by means of the OS (e.g. from the Start menu in Windows)
Primary Scenario	1. User starts the application 2. The main Jake window appears
Alternative Path	-
Postconditions	Jake is running and the user can login or register.
Exceptions	-
Frequency of use	Daily/Always

1.6   Network Operations

1.6.1   Log in to Jabber

ID	NET-01
Name	Log in to Jabber
Status	Review required
Goal/Rationale	The user wants to connect to the network in order to use Jake
Summary	In order to use Jake, a connection to a Jabber network is required. This connection is established by the user entering their network credentials in a dialog.
Preconditions	Jake is running (GEN-01)
Triggers	User interaction (active)
Primary Scenario	1. User chooses to log in 2. The user is prompted to enter username and password for the network 3. Jake attempts to connect to the server and log in 4. The user is informed of a successful connection (non-modally)
Alternative Path	If the credentials provided in step 2 are incorrect or the Jabber server cannot be reached, the user shall be informed of this and given the option to resume at step 2 in the primary scenario.
Postconditions	The user is logged in and able to use Jake.
Exceptions	-
Frequency of use	Daily / Always (on startup)

1.6.2   Log out from Jabber

ID	NET-02
Name	Log out from Jabber
Status	Review required
Goal/Rationale	The user wants to disconnect from the network
Summary	In some situations, the user may want to explicitly disconnect from the network (and not just exit the application), e.g. when they want to register a different account or do not want other people using their account to be able to use Jake with their ID. For this reason, they are able to log out, leaving the application in a similar state as after its first run.
Preconditions	The user is logged in (NET-01)
Triggers	User action (active)
Primary Scenario	1. The user chooses to log out 2. The user is logged out from the network.
Alternative Path	-
Postconditions	The user is logged out and able to log in or register.
Exceptions	-
Frequency of use	Monthly / Seldom

1.6.3   Register Jabber ID

ID	NET-03
Name	Register Jabber ID
Status	Review required
Goal/Rationale	The user wants a Jabber account to be able to use Jake
Summary	Users who do not yet have a Jabber account need to create one before using Jake. Jake guides them through the process so they can create an account on a server from within Jake.
Preconditions	Jake is running (GEN-01)
Triggers	User action (active)
Primary Scenario	1. The user chooses to register 2. The user is prompted to pick a server from a preconfigured list 3. The user is prompted to fill in a form with the required details (username, password). 4. The account is created on the server 5. The user is automatically logged in with their new account
Alternative Path	If the credentials provided in step 3 are incorrect (e.g. password to short, username already taken) or the Jabber server selected in step 2 cannot be reached, the user shall be informed of this and given the option to resume at the respective step in the primary scenario.
Postconditions	The user has a new Jabber account and is connected to the network with it, now able to use Jake.
Exceptions	-
Frequency of use	Yearly / Once (usually one jabber id is enough)

1.7 Project Management

1.7.1 Create Project

ID	PRJ-01
Name	Create Project
Status	Review required
Goal/Rationale	A new project is created every time the user wants to share a new directory.
Summary	Projects are the main working area in Jake.
Preconditions	Jake is running (GEN-01) [User does not has to be connected? Practical?]
Triggers	User action (active)
Primary Scenario	1. The User selects "New Project..." 2. The User chooses a directory OR creates a new one. There should be a default space for this sort of directories. 3. The User may changes the default name. The default name is generated as a compilance checked name of the selected directory. 4. Project is created and added to the project list.
Alternative Path	-
Postconditions	Project created.
Exceptions	• If the directory already has a project there is an error. • If the directory is not readable there is an rights error. • If a SUBDIRECTORY of this directory already is a jake project there is an error. [Needs approve! Can we do this? Seems Important! (Eclipse behaviour)]
Frequency of use	Weekly / Often

1.7.2   Receive project invitation

ID	PRJ-02
Name	Receive project invitation
Status	Review required
Goal/Rationale	In order for Jake to be useful to the user, they need to be member of at least one project. By receiving a project invitation, they can easily join a project.
Summary	A user may receive a project invitation. In order to receive this invitation the user must be logged in.
Preconditions	Jake is running (GEN-01) and the user is logged in (NET-01).
Triggers	An invitation is received (passive)
Primary Scenario	1. An invitation to a project from another Jake user is received. 2. The user is asked to accept/deny the invitation 3. The user selects the target folder for the new project 4. The project folder is created 5. The project is added to the current projects
Alternative Path	If the user declines the invitation, it may either be discarded completely or remain in a list of "undecided" invitations for accepting later.
Postconditions	The project in the invitation is now active in the local Jake workspace.
Exceptions	-
Frequency of use	Weekly/Often

1.7.3   Open project

ID	PRJ-03
Name	Open project
Status	Review required
Goal/Rationale	The user wants to reopen an existing project that is not currently open in Jake, either because it has been closed manually, or for some other reason (e.g. reinstalled Jake)
Summary	A user may open an existing project by specifying the location of the project folder. The specified project is loaded.
Preconditions	Jake is running (GEN-01), project is not already opened.
Triggers	User action (active)
Primary Scenario	1. User chooses to open project 2. User is asked to select the project in the local file system 3. Project is opened
Alternative Path	If an invalid path is selected or the folder chosen is not a Jake project, the user is asked to retry step 2. Additionally, the application could suggest that the user creates a new project at that path (PRJ-01).
Postconditions	Project is open and ready to use
Exceptions	-
Frequency of use	Monthly/Sometimes

1.7.4   Close project

ID	PRJ-04
Name	Close project
Status	Review required
Goal/Rationale	The user wants to close a project, e.g. when it is not needed for a longer period of time.
Summary	A user may close a project. Closed projects are not displayed in Jake.
Preconditions	Jake is running (GEN-01) and the project is open.
Triggers	User action (active)
Primary Scenario	1. The user chooses to close the project 2. Confirmation is requested from the user 3. The project is closed
Alternative Path	-
Postconditions	The project is closed, no longer active and no longer visible in Jake.
Exceptions	-
Frequency of use	Monthly/Sometimes

1.7.5   Pause project

ID	PRJ-05
Name	Pause project
Status	Review required
Goal/Rationale	The user wants to temporarily suspend a project, e.g. when lots of files are being synced but they currently need the bandwidth
Summary	The user may pause a project. Paused projects are still displayed in Jake but the user may not work on them.
Preconditions	Jake is running (GEN-01) and the project is open and active (running).
Triggers	User action (active)
Primary Scenario	1. The user chooses to pause the project 2. The project is paused
Alternative Path	-
Postconditions	The project is paused (not active).
Exceptions	-
Frequency of use	Weekly/Sometimes

1.7.6   Resume project

ID	PRJ-06
Name	Resume project
Status	Review required
Goal/Rationale	The user wants to resume a project that has previously been paused in order to continue working on it.
Summary	The user may resume a paused project. Resuming a paused project allows the user to work on it again.
Preconditions	Jake is running (GEN-01) and the project to be resumed is open and has previously been paused (PRJ-05)
Triggers	User action (active)
Primary Scenario	1. The user chooses to resume the project 2. The project is resumed
Alternative Path	-
Postconditions	The project is active again and the user can once again work with it.
Exceptions	-
Frequency of use	Weekly/Sometimes

1.7.7 Delete project

ID	PRJ-07
Name	Delete project
Status	Review required
Goal/Rationale	The user wants to delete a project, e.g. because they are sure they will not need it anymore.
Summary	The user may delete a project. By deleting a project its project folder is deleted.
Preconditions	Jake is running (GEN-01) and the project to be deleted is open
Triggers	User action (active
Primary Scenario	1. The user chooses to delete the project 2. The user is made aware of the lack of undoability inherent in this action and confirmation is requested 3. The project is removed from Jake 4. The folder is deleted from the filesystem
Alternative Path	-
Postconditions	The project no longer exists within Jake and the local folder has been deleted.
Exceptions	If there is a problem deleting the folder in the filesystem (e.g. locked files), the user is informed of this and restarting the computer and manually deleting the folder is suggested. The project is nonetheless removed from Jake.
Frequency of use	Monthly/Sometimes

1.7.8   Search inside project

ID	PRJ-08
Name	Search inside project
Status	Review required
Goal/Rationale	n larger projects, single files/folders/notes and users may be hard to find due to the large amount of items in the project. The user wants to find one or more items based on certain criteria.
Summary	The user may perform a search inside the project. All elements (files, folders, users, notes, tags, etc. . .) that match the search term are displayed in a results section.
Preconditions	Jake is running (GEN-01)
Triggers	User action (active)
Primary Scenario	1. The user enters search terms in a search element 2. Jake presents the results matching the query
Alternative Path	-
Postconditions	The user is presented with the results of the query and can then perform the usual actions on them.
Exceptions	If there is a problem deleting the folder in the filesystem (e.g. locked files), the user is informed of this and restarting the computer and manually deleting the folder is suggested. The project is nonetheless removed from Jake.
Frequency of use	Very frequently

1.8   People Management

1.8.1   Invite user to project ("Add user")

ID	PPL-01
Name	Invite user to project ("Add user")
Status	Review required
Goal/Rationale	The user wants to invite another user to participate in the current project
Summary	A project member may invite other users to a specific project. The invited users is identified by its user id.
Preconditions	Jake is running (GEN-01) and the user is logged in (NET-01)
Triggers	User action (active)
Primary Scenario	1. The user chooses to invite another user 2. The user is asked to enter the Jabber ID of the user to be invited 3. An invitation is sent to the invitee
Alternative Path	If the user chosen does not exist, the user is informed and given the option to resume at step 2.
Postconditions	An invitation has been sent to the user in question.
Exceptions	Connection error
Frequency of use	Weekly/Often

1.8.2   Explicitly trust project member

ID	PPL-02
Name	Explicitly trust project member
Status	Review required
Goal/Rationale	The user wants to receive files from another project member.
Summary	In order to receive files from another project member, the user must explicitly grant trust to this specific project member.
Preconditions	Jake is running (GEN-01), the user is logged in (NET-01) and the other project member exists in the context of the project.
Triggers	User action (active)
Primary Scenario	1. The user chooses to explicitly trust another member. 2. The member is identified as trusted.
Alternative Path	-
Postconditions	The trustee is now trusted and the user receives files from them.
Exceptions	Weekly/Often
Frequency of use	-

1.8.3 Revoke trust ("Remove user")

ID	PPL-03
Name	Revoke trust ("Remove user")
Status	Review required
Goal/Rationale	The user wants to revoke trust granted to a specific project member (e.g. because they share malicious files)
Summary	The user may revoke the explicit trust granted to a specific project member.
Preconditions	Jake is running (GEN-01), the user is logged in (NET-01) and the specified other project member exists in the context of the project.
Triggers	User action (active)
Primary Scenario	1. The user chooses to revoke trust from the project member 2. The user is asked to confirm this action 3. The member is removed and trust revoked.
Alternative Path	-
Postconditions	The project member in question is removed from the user list and no longer trusted.
Exceptions	-
Frequency of use	Monthly/Sometimes

1.8.4 Set auto add/remove

ID	PPL-04
Name	Set auto add/remove
Status	Review required
Goal/Rationale	The user wants to have changes to the project member list of certain other members propagated to their own
Summary	The user may set/remove the auto add/remove flag on project members on his/her project member list.
Preconditions	Jake is running (GEN-01) and the specified user exists in the context of the project
Triggers	User action (active)
Primary Scenario	1. The user chooses to set auto add/remove on a project member 2. The flag is set for this project member.
Alternative Path	-
Postconditions	Peers from the specified user will now always be added to the user's own member list (and removed, see SRS).
Exceptions	-
Frequency of use	Weekly/Sometimes (e.g. when a new user is added)

1.8.5 Show project member list

ID	PPL-05
Name	Show project member list
Status	Review required
Goal/Rationale	The user wants to see all members of the current project
Summary	Display member list.
Preconditions	Jake is running (GEN-01)
Triggers	User action (active)
Primary Scenario	1. The user chooses to display the project member list 2. The project member list is displayed
Alternative Path	-
Postconditions	The project member list is displayed
Exceptions	-
Frequency of use	Daily/Often

1.8.6   Show global project member list

ID	PPL-06
Name	Show global project member list
Status	Review required
Goal/Rationale	The user wants to see all members of all open projects.
Summary	Display the global project member list, that contains all known project members.
Preconditions	Jake is running (GEN-01)
Triggers	User action (active)
Primary Scenario	1. The user chooses to display the global project member list 2. The global project member list is displayed
Alternative Path	-
Postconditions	The global project member list is displayed.
Exceptions	-
Frequency of use	Sometimes/Weekly

1.8.7   Receive member alert

ID	PPL-07
Name	Receive member alert
Status	Review required
Goal/Rationale	The user wants to know who is added to the project by other members
Summary	If a user is added/removed from the project by another project member, the user will be notified.
Preconditions	Jake is running (GEN-01) and the user is logged in (NET-01)
Triggers	Incoming member alert (passive)
Primary Scenario	1. A member alert is received by Jake 2. Jake notifies the user of this event. 3. Jake adds the new member to its own project member list.
Alternative Path	-
Postconditions	The new member is in the local project member list
Exceptions	-
Frequency of use	Sometimes/weekly

1.9   File Management - Local/Offline Operations

1.9.1   Show files

ID	FIM-01
Name	Show files
Status	Review required
Goal/Rationale	The user wants to see the files that are part of a project
Summary	The files in the project are displayed
Preconditions	Jake is running (GEN-01)
Triggers	User action (active)
Primary Scenario	1. The user chooses to display the files of a project 2. The files are displayed.
Alternative Path	-
Postconditions	The user can browse through the project files.
Exceptions	-
Frequency of use	Very often

1.9.2   Import files

ID	FIM-02
Name	Import files
Status	Review required
Goal/Rationale	The user wants to add further files into the project folder
Summary	The user specifies files/folder to be imported into Jake. The rename assistant may be awakened by this action.
Preconditions	Jake is running (GEN-01)
Triggers	User action (active)
Primary Scenario	1. The user chooses to add further files 2. The user is prompted to select the desired files 3. The files are added to the project and copied to the project folder
Alternative Path	The user may just add the files by means of drag&drop. If a file doesn't conform to the Jake naming standards, the user will be prompted if they want to rename the file (–¿ FIM-11)
Postconditions	The files are now part of the project
Exceptions	-
Frequency of use	Daily/Often

1.9.3 Reflect changes

ID	FIM-03
Name	Reflect changes
Status	Review required
Goal/Rationale	Changes in the project folder should be mirrored within Jake
Summary	Whenever changes in the project folder occur, Jake reflects it to the user.
Preconditions	Jake is running (GEN-01)
Triggers	A change occurs in the filesystem (passive)
Primary Scenario	1. The files are added
Alternative Path	If a newly created file doesn't conform to the Jake naming standards, the user will be prompted if they want to rename the file (−¿ FIM-11)
Postconditions	The change is reflected within the project view
Exceptions	-
Frequency of use	Very often

1.9.4 Delete files/folders

ID	FIM-04
Name	Delete files/folders
Status	Review required
Goal/Rationale	The user wants to delete one or more files/folder from within Jake
Summary	Delete files/folder, batch enabled.
Preconditions	Jake is running (GEN-01)
Triggers	User action (active)
Primary Scenario	1. The user selects one or more files/folders 2. The user chooses to delete these items 3. The user is prompted for confirmation 4. The items are deleted
Alternative Path	-
Postconditions	The files are no longer part of the project and are moved to the OS trash
Exceptions	-
Frequency of use	Daily/Often

1.9.5   Rename file/folder

ID	FIM-05
Name	Rename file/folder
Status	Review required
Goal/Rationale	The user wants to rename a file or folder from within Jake.
Summary	Rename a file or a folder.
Preconditions	Jake is running (GEN-01)
Triggers	User action (active)
Primary Scenario	1. The user selects a file/folder 2. The user chooses to rename this item 3. The item is renamed.
Alternative Path	-
Postconditions	The item is renamed both within the project and in the local file system
Exceptions	-
Frequency of use	Daily/Often

1.9.6   Move files/folders

ID	FIM-06
Name	Move files/folders
Status	Review required
Goal/Rationale	The user wants to move files or folders within the project directory using Jake
Summary	Move files or folders, batch enabled.
Preconditions	Jake is running (GEN-01)
Triggers	User action (active)
Primary Scenario	1. The user selects one or more files or folders to be moved 2. The user indicated that they want to move these items 3. The items are moved, the project view is updated and the changes are applied to the local file system.
Alternative Path	If the operation is invalid in some way, the user is informed of this and no changes are applied.
Postconditions	The items are in their respective new location both within the project and on the filesystem.
Exceptions	-
Frequency of use	Often/Daily

1.9.7 Create folder

ID	FIM-07
Name	Create folder
Status	Review required
Goal/Rationale	The user wants to create a new folder inside a project
Summary	Create a new folder from within Jake
Preconditions	Jake is running (GEN-01)
Triggers	User action (active)
Primary Scenario	1. The user chooses to create a new folder at a specified location 2. The new folder is created
Alternative Path	If the location or folder name are invalid, the user is informed of this and no changes are applied.
Postconditions	The new folder is created in the filesystem and displayed in the project.
Exceptions	-
Frequency of use	Often/Daily

1.9.8 Launch file

ID	FIM-08
Name	Launch file
Status	Review required
Goal/Rationale	The user wants to launch a file and display its contents
Summary	Launch a file with its associated external application from within Jake.
Preconditions	Jake is running (GEN-01)
Triggers	User action (active)
Primary Scenario	1. The user chooses to launch a file 2. The file is launched by means of the OS
Alternative Path	-
Postconditions	The file is displayed to the user.
Exceptions	-
Frequency of use	Very often

1.9.9   Launch folder in OS-specific file browser

ID	FIM-09
Name	Launch folder in OS-specific file browser
Status	Review required
Goal/Rationale	The user wants to open a folder in the OS's file browser
Summary	Open a folder in the os specific file browser.
Preconditions	Jake is running (GEN-01)
Triggers	User action (active)
Primary Scenario	1. The user chooses to launch a folder 2. The folder is launched in the OS file browser.
Alternative Path	-
Postconditions	The user can browse through the folder in the OS file browser
Exceptions	-
Frequency of use	Very often

1.9.10   Rename illegally-named files

ID	FIM-10
Name	Rename illegally-named files
Status	Review required
Goal/Rationale	The user wants to share files that have illegal filenames
Summary	Run the rename assistant to rename files/folders with illegal name.
Preconditions	Jake is running (GEN-01) and one or more files with illegal names exist
Triggers	User action (active)
Primary Scenario	1. The user chooses to have their files renamed so they can be shared 2. The user is prompted whether they really want to perform this operation and can see a list of files that would be affected. 3. The files are renamed.
Alternative Path	-
Postconditions	The files with illegal filenames have been renamed.
Exceptions	-
Frequency of use	Sometimes/Weekly

1.9.11   Offer renaming

ID	FIM-11
Name	Offer renaming
Status	Review required
Goal/Rationale	The user wants to share
Summary	The user kick-starts the rename assistant.
Preconditions	Jake is running (GEN-01) and one or more files with illegal names exist
Triggers	On import of illegally-named files (passive), triggered by FIM-02.
Primary Scenario	1. The user is informed about the existence of illegally named files, including a list of affected files, and is asked whether they want to rename them right now 2. The files are renamed
Alternative Path	If the user rejects the renaming prompt, the files continue to exist both within the project and on the local filesystem, but are not synced. The user can then manually or automatically rename them at a later date.
Postconditions	The files with illegal filenames have been renamed (if the user chose to proceed with the process).
Exceptions	Sometimes/weekly
Frequency of use	-

1.9.12 Add tag to file

ID	FIM-12
Name	Add tag to file
Status	Review required
Goal/Rationale	The user wants to add a tag to a file.
Summary	The user may add a tag to a file. Only one file at a time.
Preconditions	Jake is running (GEN-01)
Triggers	User action (active)
Primary Scenario	1. The user selects a file 2. The user chooses to add a tag and types the tag name 3. The tag is added to the file
Alternative Path	If the file is already tagged with a tag of the same name, the new tag is ignored.
Postconditions	The file is tagged with a tag of the chosen name
Exceptions	-
Frequency of use	Very Often

1.9.13 Remove tag from file

ID	FIM-13
Name	Remove tag from file
Status	Review required
Goal/Rationale	The user wants to remove a tag from a file.
Summary	The user may remove a tag from a file. Only one tag from one file at a time.
Preconditions	Jake is running (GEN-01)
Triggers	User action (active)
Primary Scenario	1. The user selects a tagged file 2. The user chooses to remove a tag from the file 3. The tag is removed from the file.
Alternative Path	-
Postconditions	The file is no longer tagged with a tag of that name
Exceptions	-
Frequency of use	Very Often

1.9.14   Show file properties

ID	FIM-14
Name	Show file properties
Status	Review required
Goal/Rationale	The user wants to get more information about a file in the project
Summary	Show detailed file properties, i.e name, size, last edit, status, etc.
Preconditions	Jake is running (GEN-01)
Triggers	User action (active)
Primary Scenario	1. The user selects a file 2. The user chooses to display further information 3. Further information about the file is shown
Alternative Path	-
Postconditions	The user received detailed information about the selected file
Exceptions	-
Frequency of use	Sometimes

1.9.15   Announce file

ID	FIM-15
Name	Announce file
Status	Review required
Goal/Rationale	The user wants to announce a file to the other project members
Summary	Announce a file and specify a announce message.
Preconditions	Jake is running (GEN-01)
Triggers	User action (active) or locally modified file with auto-announce enabled (passive)
Primary Scenario	1. The user chooses to announce a file 2. The file is announced
Alternative Path	The file is automatically announced should the auto-announce feature be enabled.
Postconditions	The file is announced and in the log.
Exceptions	-
Frequency of use	Very often

1.9.16   Download file

ID	FIM-16
Name	Download file
Status	Review required
Goal/Rationale	The user wants to download a file from a remote peer
Summary	Download a file from a remote peer
Preconditions	Jake is running (GEN-01) and the user is logged in (NET-01)
Triggers	User action (active) or remotely modified file with auto-pull enabled (passive)
Primary Scenario	1. The user chooses to download a file 2. The file is downloaded
Alternative Path	The file is automatically downloaded should the auto-pull feature be enabled.
Postconditions	The file exists locally (both in project & filesystem)
Exceptions	-
Frequency of use	Very often

1.9.17 Resolve conflict

ID	FIM-17
Name	Resolve conflict
Status	Review required
Goal/Rationale	When a conflict occurs, the user wants to receive simple assistance in resolving it.
Summary	Run the conflict resolution assistant.
Preconditions	Jake is running (GEN-01) and the user is logged in (NET-01)
Triggers	A local operation and a remote operation have resulted in a conflict situation (passive)
Primary Scenario	1. The user is prompted for action to resolve the conflict. 2. The user can optionally view the two conflicting items 3. The user chooses a way of resolving the conflict 4. The conflict resolution process is performed.
Alternative Path	The user can choose to temporarily dismiss the message and resolve the conflict later by some means that results in step 1 in this use case being triggered.
Postconditions	There is no longer a conflict.
Exceptions	-
Frequency of use	Sometimes

1.9.18   Set/unset soft lock

ID	FIM-18
Name	Set/unset soft lock
Status	Review required
Goal/Rationale	The user wants to edit a file alone, trying to make sure that nobody else edits it at the same time
Summary	Set the softlock for a file, optionally specifying a locking message.
Preconditions	Jake is running (GEN-01)
Triggers	User action (active)
Primary Scenario	1. he user selects a file 2. The user chooses to set/unset the file's soft lock, optionally specifying a message to indicate their reason for setting the lock 3. The file is locked.
Alternative Path	-
Postconditions	The file is locked and other users, if their Jake client is aware of the lock, receive some sort of indication of this fact.
Exceptions	-
Frequency of use	Sometimes

1.10   Note Management - Local/Offline Operations

1.10.1   Show notes

ID	-
Name	Show notes
Status	-
Goal/Rationale	-
Summary	-
Preconditions	-
Triggers	-
Primary Scenario	-
Alternative Path	-
Postconditions	-
Exceptions	-
Frequency of use	-

1.10.2   Add note

ID	-
Name	Add note
Status	-
Goal/Rationale	-
Summary	Add a note by specifying its content
Preconditions	-
Triggers	-
Primary Scenario	-
Alternative Path	-
Postconditions	-
Exceptions	-
Frequency of use	-

1.10.3   Delete note

ID	-
Name	Delete note
Status	-
Goal/Rationale	-
Summary	delete note, batch enabled
Preconditions	-
Triggers	-
Primary Scenario	-
Alternative Path	-
Postconditions	-
Exceptions	-
Frequency of use	-

1.10.4   Edit note

ID	-
Name	Edit note
Status	-
Goal/Rationale	-
Summary	-
Preconditions	-
Triggers	-
Primary Scenario	-
Alternative Path	-
Postconditions	-
Exceptions	-
Frequency of use	-

1.10.5   Add/remove/alter tag

ID	-
Name	Add/remove/alter tag
Status	-
Goal/Rationale	-
Summary	-
Preconditions	-
Triggers	-
Primary Scenario	-
Alternative Path	-
Postconditions	-
Exceptions	-
Frequency of use	-

1.11   Online/Sharing Operations

1.11.1   Announce note

ID	-
Name	Announce note
Status	-
Goal/Rationale	-
Summary	announce a note, specify a announce message.
Preconditions	-
Triggers	-
Primary Scenario	-
Alternative Path	-
Postconditions	-
Exceptions	-
Frequency of use	-

1.11.2   Download note

ID	-
Name	Download note
Status	-
Goal/Rationale	-
Summary	-
Preconditions	-
Triggers	-
Primary Scenario	-
Alternative Path	-
Postconditions	-
Exceptions	-
Frequency of use	-

1.11.3   Resolve confilct (active, passive e.g. on announce)

ID	-
Name	Resolve confilct (active, passive e.g. on announce)
Status	-
Goal/Rationale	-
Summary	run the conflict resolution assistant for notes.
Preconditions	-
Triggers	-
Primary Scenario	-
Alternative Path	-
Postconditions	-
Exceptions	-
Frequency of use	-

1.11.4   (Set/unset soft lock)

ID	-
Name	(Set/unset soft lock)
Status	-
Goal/Rationale	-
Summary	set/unset soft lock, specify locking message.
Preconditions	-
Triggers	-
Primary Scenario	-
Alternative Path	-
Postconditions	-
Exceptions	-
Frequency of use	-

1.12   Log Operations

1.12.1   Display global project log

ID	-
Name	Display global project log
Status	-
Goal/Rationale	-
Summary	-
Preconditions	-
Triggers	-
Primary Scenario	-
Alternative Path	-
Postconditions	-
Exceptions	-
Frequency of use	-

1.12.2   Display file log

ID	-
Name	Display file log
Status	-
Goal/Rationale	-
Summary	display the log messages associated with a specific file
Preconditions	-
Triggers	-
Primary Scenario	-
Alternative Path	-
Postconditions	-
Exceptions	-
Frequency of use	-

1.12.3   Display note log

ID	-
Name	Display note log
Status	-
Goal/Rationale	-
Summary	display the log messages associated with a specific note
Preconditions	-
Triggers	-
Primary Scenario	-
Alternative Path	-
Postconditions	-
Exceptions	-
Frequency of use	-

1.13   Preferences

1.13.1   edit project prefs

ID	-
Name	edit project prefs
Status	-
Goal/Rationale	-
Summary	-
Preconditions	-
Triggers	-
Primary Scenario	-
Alternative Path	-
Postconditions	-
Exceptions	-
Frequency of use	-

1.13.2   edit global prefs

ID	-
Name	edit global prefs
Status	-
Goal/Rationale	-
Summary	-
Preconditions	-
Triggers	-
Primary Scenario	-
Alternative Path	-
Postconditions	-
Exceptions	-
Frequency of use	-