

REST API Design

for

Professional Developer's Tool

Prepared by

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Common exceptions

All common exceptions has this syntax:

```
{
  "status" : "error",
  "reason" : "a human readable string describing the error"
}
```

HTTP status codes:

- Request error (e.g. GET instead of POST, etc.): 405
- User not authenticated: 403
- User has no permission to do that: 402 (abuse of unused HTTP error code)
- General back-end error: 500

All Date fields are strings. All Date fields are ISO8601 compliant.

Account

Path:	/account/userinfo
Request:	GET
Description:	Return information about current logged user or other user. NOTE: for security reason it's not possible to retrieve the password field.
Parameters:	None for retrieve information of current user. Otherwise: <ul style="list-style-type: none"> • id : integer
Authentication:	Needed.
Response format:	<pre>{ "id" : integer, "firstname" : string, "lastname" : string, "sex" : string ("M" or "F"), "dateOfBirth" : Date, "country" : string, "timezone" : string (IANA format), "email" : string, "languages" : [string, string, ...], "type" : string ("stakeholder" or "developer") }</pre>

Path:	/account/register
Request:	POST
Description:	Register a new user. The type of the user cannot be changed after registration.
Authentication:	No. ¹
Parameters:	<ul style="list-style-type: none"> • firstname : string • lastname : string

¹ It's not allowed creating new account by already authenticated user (in case, server returns a 405 http error).

	<ul style="list-style-type: none"> sex : string ("M" or "F") dateOfBirth : Date country : string timezone : string (IANA format) email : string password : string (plain-text) languages : string [] "type" : string ("stakeholder" or "developer")
Response format:	{ "status" : "ok" }
Exception 1 error code:	200 – E-Mail already exists
Exception 1 format:	{ "status" : "error", "code" : 1 }
Exception 2 error code:	200 – Wrong field value
Exception 2 format:	{ "status" : "error", "code" : 2, "field" : string (name of problematic field, e.g. "firstname" or "email") "reason" : " ... " }

Path:	/account/edit
Request:	POST
Description:	Edit the current user profile. All parameters are optional, it is possible to specify only fields that will be changed.
Authentication:	Needed.
Parameters:	<ul style="list-style-type: none"> firstname : string lastname : string sex : string ("M" or "F") dateOfBirth : Date country : string timezone : string (IANA format) email : string password : string (plain-text) languages : string []
Response format:	{ "status" : "ok" }
Exception 1 error code:	200 – E-Mail already exists
Exception 1 format:	{ "status" : "error", "code" : 1 }
Exception 2 error code:	200 – Wrong field value
Exception 2 format:	{ "status" : "error", "code" : 2, }

	<pre> "field" : string (name of problematic field, e.g. "firstname" or "email") "reason" : " ..." </pre>
--	--

Path:	/account/login
Request:	POST
Description:	Login. Reponse to this request sets cookie/session information (in case of login success).
Authentication:	Not needed ²
Parameters:	<ul style="list-style-type: none"> email : string password : string (plain text)
Response format:	<pre> { "status" : "ok" } </pre>
Exception 1 error code:	200 – Login failed
Exception 1 format:	<pre> { "status" : "error" } </pre>

Path:	/account/logout
Request:	GET
Description:	Delete the session cookies and log out user.
Parameters:	None.
Authentication:	Not needed. ³
Response format:	<pre> { "status" : "ok" } </pre>

Path:	/account/recoverpassword
Request:	POST
Description:	Send an email to reset the password
Authentication:	No. ⁴
Parameters:	<ul style="list-style-type: none"> email : string dateOfBirth : Date
Response format:	<pre> { "status" : "ok" } </pre>
Exception 1 error code:	200 – Wrong fields
Exception 1 format:	<pre> { "status" : "error" } </pre>

² In case the user is already authenticated, this request as no effects.

³ In case the user is not authenticated, this request as no effects.

⁴ Resetting password is not allowed by already authenticated user (in case, server returns a 405 http error).

Path:	/account/listdevelopers
Request:	GET
Description:	Use this request to retrieve the list of all developers (use /account/userinfo to retrieve more information about a specific user).
Parameters:	None.
Authentication:	Needed.
Response format:	<pre>{ developers" : [{ "id" : integer, "firstname" : string, "lastname" : string }, { "id" : integer, "firstname" : string, "lastname" : string },] }</pre>

Projects

Path:	/projects/list
Request:	GET
Description:	Return a list of projects available (possibly empty) visible by current user
Authentication:	Needed.
Parameters:	None
Response format:	<pre>{ "projects" : [{ "id" : integer "name" : string , "description" : string, "manager" : integer, "stakeholder" : integer, "developers" : [integer, integer, ...], "creationDate" : Date }, { ... }] }</pre>

Path:	/projects/create
Request:	POST
Description:	Create a new project.
Authentication:	Needed, you must be a <i>stakeholder</i> user.
Parameters:	<ul style="list-style-type: none"> • name : string • description : string • manager : integer
Response format:	{

	<pre> "status" : "created" "id" : integer </pre>
Exception 1 error code:	200 – Project name already exists
Exception 1 format:	<pre> { "status" : "error" } </pre>

Path:	/projects/{idproj}/adddeveloper
Request:	POST
Description:	Add developer to existent project
Authentication:	Needed, you must be a <i>manager</i> of that project.
Parameters:	<ul style="list-style-type: none"> iddev : integer
Response format:	<pre> { "status" : "ok" } </pre>

Path:	/projects/{idproj}/remdeveloper
Request:	POST
Description:	Remove developer from existent project
Authentication:	Needed, you must be a <i>manager</i> of that project.
Parameters:	<ul style="list-style-type: none"> iddev : integer
Response format:	<pre> { "status" : "ok" } </pre>

Path:	/projects/{idproj}/edit
Request:	POST
Description:	Edit a project. All parameters are optional, it is possible to specify only fields that will be changed.
Authentication:	Needed, you must be a <i>manager</i> of that project.
Parameters:	<ul style="list-style-type: none"> name : string description : string manager : int
Response format:	<pre> { "status" : "ok" } </pre>

Projects - Backlog

Path:	/projects/{idproj}/getbacklog
Request:	GET
Description:	Return the backlog of specified projects with assigned PBIs
Authentication:	Needed.
Parameters:	None

Response format:	<pre>{ "description" : string, "pbis" : [{ "id" : integer "name" : string , "description" : string, "sprintlog" : integer/null, "type" : string (enum), "priority" : integer, "creationDate" : Date }, { ... }] }</pre>
------------------	---

Path:	/projects/{idproj}/createbacklog
Request:	POST
Description:	Create a backlog for existent project
Authentication:	Needed, you must be a <i>manager</i> of that project.
Parameters:	<ul style="list-style-type: none"> description : string
Response format:	<pre>{ "status" : "ok" }</pre>

Path:	/projects/{idproj}/deletebacklog
Request:	POST
Description:	Delete the backlog of specified project. WARNING: this action deletes also all PBIs, all tasks, and all sprint logs.
Authentication:	Needed, you must be a <i>manager</i> of that project.
Parameters:	None.
Response format:	<pre>{ "status" : "ok" }</pre>

Projects - PBIs

Path:	/projects/{idproj}/pbis/create
Request:	POST
Description:	Update information of indicated pbis of selected project
Authentication:	Needed, you must be a <i>manager</i> of that project.
Parameters:	<ul style="list-style-type: none"> name : string description : string type : string (enum) priority : int
Response format:	<pre>{ "status" : "ok" }</pre>

Exception 1 error code:	200 – Wrong format of one or more fields
Exception 1 format:	<pre>{ "status" : "error", "field" : string (name of problematic field, e.g. "name" or "priority") "reason" : " ..." }</pre>

Path:	/projects/{idproj}/pbis/{idpbis}/edit
Request:	POST
Description:	Update information of indicated pbis of selected project. All parameters are optional, it is possible to specify only fields that will be changed.
Authentication:	Needed, you must be a <i>manager</i> of that project.
Parameters:	<ul style="list-style-type: none"> • name : string • description : string • type : string (enum) • priority : int
Response format:	<pre>{ "status" : "ok" }</pre>

Path:	/projects/{idproj}/pbis/{idpbis}/delete
Request:	POST
Description:	Delete a PBI from the project
Authentication:	Needed, you must be a <i>manager</i> of that project.
Parameters:	None.
Response format:	<pre>{ "status" : "ok" }</pre>

Projects - Sprintlog

Path:	/projects/{idproj}/sprintlogs/list
Request:	GET
Description:	Return the list of sprintlogs of current project
Authentication:	Needed.
Parameters:	None
Response format:	<pre>{ "sprintlogs" : [{ "id" : integer "name" : string , "description" : string, "startDate" : Date, "endDate" : Date }, {...}, ...] }</pre>

Path:	/projects/{idproj}/sprintlogs/create
Request:	POST
Description:	Create a new sprintlogs with list of pbis (you need to have created pbis before)
Authentication:	Needed, you must be a <i>manager</i> of that project.
Parameters:	<ul style="list-style-type: none"> • name : string • description : string • startDate : Date • endDate: Date • idpbis : integer[]
Response format:	{ "status" : "ok" }
Exception 1 error code:	200 – Wrong format of one or more fields
Exception 1 format:	{ "status" : "error", "code" : 1, "field" : string (name of problematic field, e.g. "name" or "priority") "reason" : " ... " }
Exception 2 error code:	200 – Sprintlog name already exists
Exception 2 format:	{ "status" : "error", "code" : 2 }

Path:	/projects/{idproj}/sprintlogs/{idsprintlog}/listpbis
Request:	GET
Description:	Return the list of PBIs associated to sprintlogs of current project
Authentication:	Needed.
Parameters:	None
Response format:	{ "pbis" : [integer, integer, integer , ...] TBD: all fields of pbis or only ids like this? }

Path:	/projects/{idproj}/sprintlogs/{idsprintlog}/addpbi
Request:	POST
Description:	Add already existent pbi to the sprintlog
Authentication:	Needed, you must be a <i>manager</i> of that project.
Parameters:	<ul style="list-style-type: none"> • id : integer
Response format:	{ "status" : "ok" }
Exception 1 error code:	200 – PBI does not exists or already assigned
Exception 1 format:	{ "status" : "error" }

	}
--	---

Path:	/projects/{idproj}/sprintlogs/{idsprintlog}/removepbi
Request:	POST
Description:	Remove pbi from sprintlog (this method doesn't delete the pbi from project)
Authentication:	Needed, you must be a <i>manager</i> of that project.
Parameters:	<ul style="list-style-type: none"> id : integer
Response format:	<pre>{ "status" : "ok" }</pre>
Exception 1 error code:	200 – PBI does not exists or assigned to other sprintlog
Exception 1 format:	<pre>{ "status" : "error" }</pre>

Projects - Tasks

Path:	/projects/{idproj}/pbis/{idpbis}/listtasks
Request:	GET
Description:	Return the list of tasks associated to PBI indicated
Authentication:	Needed.
Parameters:	None
Response format:	<pre>{ "tasks" : [{ "id" : integer, "name" : string, "description" : string, "points" : integer, "developer" : integer, "state" : string (enum), "pbi" : integer }, ...] }</pre>

Path:	/projects/{idproj}/pbis/{idpbis}/addtask
Request:	POST
Description:	Add a task to indicated PBI.
Authentication:	Needed, you must be a <i>manager</i> of that project.
Parameters:	<ul style="list-style-type: none"> name : string description : string points : integer developer : integer state : string (enum)

	<ul style="list-style-type: none"> pbi : integer
Response format:	<pre>{ "status" : "ok" }</pre>

Path:	/projects/{idproj}/pbis/{idpbis}/tasks/{idtask}/delete
Request:	POST
Description:	Remove task from indicated PBI.
Authentication:	Needed, you must be a <i>manager</i> of that project.
Parameters:	None.
Response format:	<pre>{ "status" : "ok" }</pre>

Path:	/projects/{idproj}/pbis/{idpbis}/tasks/{idtask}/edit
Request:	POST
Description:	Edit task indicated. All parameters are optional, it is possible to specify only fields that will be changed.
Authentication:	Needed, you must be a <i>manager</i> of that project.
Parameters:	<ul style="list-style-type: none"> name : string description : string points : integer developer : integer state : string (enum) pbi : integer
Response format:	<pre>{ "status" : "ok" }</pre>