

### Traceability Table

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Functional Requirement	Class Name	Method name
FR0 Register an application, register area, register collaborator	Main <b>Class</b>	registerMenu() : void
		registerApplication() : void
		registerArea(collaboratorArea Selection : int) : void
		registerCollaborator() : void
	Controller <b>Class</b>	registerApplication(shortDesc ription : String, collaboratorName : String, applicationCode : String) : String
		addArea(areaName : String, areaInternalCode : String, areaTempTypeSelection : int) : String
		addCollaborator(collaboratorI dDocument : String, collaboratorFullName : String, collaboratorEmail : String, collaboratorExtensionNumber : int, areaInternalCode : String)
	Application <b>Class</b>	Application(registrationDate : Date, shortDescription : String,applicationStatus : Status, applicationCode : String, applicationCollaborator : Collaborator,applicationMana gementDate : Date)
	AreaTransformation <b>Class</b>	AreaTransformation(areaNa me : String, areaInternalCode : String)
	ApplicantArea <b>Class</b>	AreaApplicant(areaName : String, areaInternalCode : String, officeBelonging :

		String, collaboratorResponsible : Collaborator)
	Area <b>Class</b>	Area(areaName : String, internalCode : int)
	Collaborator <b>Class</b>	Collaborator(collaboratorIdDo cument : String, collaboratorFullName : String, collaboratorEmail : String, collaboratorExtensionNumber : int, collaboratorArea : Area)
FR1 Change the status of an application	Main <b>Class</b>	changeApplicationStatus() : void
	Controller <b>Class</b>	modifyApplicationStatus(appli cationCode : String, applicationStatusSelection : int)
	Application <b>Class</b>	setApplicationManagementD ate(applicationManagementD ate : Date)  setApplicationStatus(applicati onStatus : Status)
FR2 Register projects of each type	Main <b>Class</b>	registerProjectMenu() : void  registerProject(projectSelecti on : int)
	Controller <b>Class</b>	addProject(applicationCode : String, areaInternalCode : String, projectCode : String, projectName : String, projectStatusSelection : int, projectPrioritySelection : int, projectLeaderName : String, processName : String, projectImpactedCommunityS election : int, projectTypeSelection : int)
		addProject(applicationCode : String, areaInternalCode : String, projectCode : String, projectName : String, projectStatusSelection : int,

		projectPrioritySelection : int, projectLeaderName : String, processId : String)
	Area <b>Class</b>	addProject(projectKnowledge Management : ProjectKnowledgeManageme nt) : void
		addProject(projectProcessTra nsformationImprovement : ProjectProcessTransformatio nImprovement)
	ProjectKnowledgeManageme nt <b>Class</b>	ProjectKnowledgeManageme nt(projectCode : String, projectName : String, projectStatus : Status, projectClassificationDate : Date, projectLeader : Collaborator, projectPriority : ProjectPriority, estimatedProjectEndDate : Date, endProjectDate : Date, registrationProjectDate : Date, processName : String, impactedCommunity : ImpactedCommunity, projectType : ProjectType)
	ProjectProcessTransformatio nImprovement <b>Class</b>	ProjectProcessTransformatio nImprovement(projectCode : String, projectName : String, projectStatus : Status, projectClassificationDate : Date, projectLeader : Collaborator, projectPriority : ProjectPriority, estimatedProjectEndDate : Date, endProjectDate : Date, registrationProjectDate : Date, processId : String)
FR3 Finish or close a project	Main <b>Class</b>	closeProject() : void
	Controller <b>Class</b>	closeProject(projectCode : String) : String
	Project <b>Class</b>	setEndProjectDate(endProjec tDate : Date) : void

FR4 View project information as matrix	Main <b>Class</b>	matrixProjectView() : void
	Controller <b>Class</b>	matrixProject(areaInternalCode : String) : String
	Collaborator <b>Class</b>	getCollaboratorFullName() : String
		getCollaboratorArea(): Area
	Area <b>Class</b>	getProjectList() : ArrayList<Project>
	Project <b>Class</b>	getProjectCode() : String
		getEstimatedProjectEndDate() : Date
		getProjectPriority() : ProjectPriority
	ProjectPriority <b>Enum</b>	getValue() : String
FR5 Query detailed information about a project	Main <b>Class</b>	showProject() : void
	Controller <b>Class</b>	showProject(projectCode : String) : String
	Area <b>Class</b>	getProjectList() : ArrayList<Project>
	Project <b>Class</b>	getProjectCode() : String
		toString() : String
	ProjectKnowledgeManagement <b>Class</b>	toString() : String
	ProjectProcessTransformationImprovement <b>Class</b>	toString() : String
FR6 Query efficiency	Main <b>Class</b>	efficiencyMenu() : void
		efficiencyCollaborator() : void
		efficiencyProject() : void
		efficiencyApplication() : void
	Controller <b>Class</b>	efficiencyCollaborator(collaboratorIdDocument : String, monthSelection ; int)

		efficiencyProject(projectCode : String) : String
		efficiencyApplication(applicationCode : String) : String
	Collaborator <b>Class</b>	calculateCollaboratorEfficiency(projectFinishedCounter : int, projectsAmount : int) : double
	Project <b>Class</b>	calculateProjectEfficiency() : double
	Application <b>Class</b>	calculateApplicationEfficiency() : double
FR7 Query the global work indicators of the Transformation/Process Improvement area	Main <b>Class</b>	globalWorkIndicatorsMenu() : void
		indicatorTypePriority() : void
		indicatorProjectLed() : void
		indicatorApplicationReceived() : void
	Controller <b>Class</b>	indicatorTypePriority() : String
		indicatorProjectLed() : String
		indicatorApplicationReceived() : String
FR8 Generate test objects	Main <b>Class</b>	createTestObjects() : void
	Controller <b>Class</b>	createTestObjects() : String