

## **BEP** frontent

### BEP development

Aim is to create project management system, suitable for common business, educational or research projects

Solution based on Redmine.

Redmine is project management web application written using the Ruby on Rails framework.

It is cross-platform and cross-database.



### Main technical modifications

- Adjustment and configuration of Redmine for BEP purposes
- Upgrading the backend system, with the required functionalities
- Set-up and maintenance of monitoring system
- Integration of BEP with BigBlueButton
- Integration of Moodle with BEP online conferencing
- **Development of mobile frontend**



#### Testing BigBlueButton in Skopje







#### Technologies used for mobile frontend

Simplified version for overviewing projects and tasks

**AngularJS** (https://angularjs.org/) is a structural framework for dynamic web apps.





**Bootstrap** (http://getbootstrap.com/) is used for mobile friendly development, to create BEP frontend responsive.



#### Technologies used for Mobile frontend

**Bower** (https://bower.io/) tool is used to manage BEP frontend development.

For programming purposes **NPM** (https://www.npmjs.com/) is used to share and reuse code.

For managing multiple languages in BEP **angular-gettext** tool is used

**UI-Router angular-ui-router** (https://ui-router.github.io/) tool is used for routing single page websites

**SASS CSS** (http://sass-lang.com/) is used to describe Cascade Style Sheets for BEP frontend.

#### Technologies used for Mobile frontend

**UI Bootstrap ui-bootstrap** (https://angularui.github.io/bootstrap/) is used to create a link between bootstrap and angular framework.

**jQuery** (https://jquery.com/) JavaScript library to write JavaScript code for frontend.

**Gulp** (http://gulpjs.com/) tool is used to support frontend development, such as reloading the browser automatically whenever a file is saved and optimizing assets like CSS, JavaScript, and images.

#### Mobile frontend development

Redmine REST API was used to create mobile friendly frontend of the BEP system, such as Issues, Trackers, Users and Enumerations

#### **Redmine API**

Redmine exposes some of its data through a REST API. This API provides access and basic CRUD operations (creately below. The API supports both ID XML and ID JSON formats.

#### **API Description**

Resource	Status	Notes	Availability
Issues	Stable		1.0
Projects	Stable		1.0
Designed Manakasakian	A lue le m		4.4

#### Mobile frontend login screen

*	Innovative Strategic Partnership for European Higher Education	
	SPEHE	
	ingus	
	••••••	
	Login	

#### Mobile frontend projects screen

Innovative Strategic Partnership for European Higher Education	
Projects Tasks	USER:ingus.smits@gmail.com LOG OUT
ACTIVE PROJEC	:TS
BEP testing project for BEP platform testing	[All tasks] [My Tasks]
<ul> <li>Educational case</li> <li>General Case</li> </ul>	[Add task] [All tasks] [My Tasks] [Add task] [All tasks] [My Tasks]
.IT case	[Add task] [All tasks] [My Tasks]
Research case	[Add task] [All tasks] [My Tasks]
FBE International Cooperation	[Add task] [All tasks] [My Tasks]
• Choosing a product Joing project between institutions for choosing a product.	[Add task] [All tasks] [My Tasks]
Ispehe Innovative Strategic Partnership for European Higher Education.	[Add task] [All tasks] [My Tasks]

#### Mobile frontend tasks screen



Subject: Test123	Start date: 2016-09-26 Due date: 2016-09-29
ProjectEducational case	
Test	
Status:In Progress	
Tracker: Activity	
Assigned to:Ingus Smits	
Priority: <b>Normal</b>	
Done ratio:	
20	

#### Mobile frontend tasks status

	Change tasks status to : Re	solved
	Comments	
Show only my tasks 🕜 Show closed tasks 🌑		
Subject: Test123		
ProjectEducational case Test		Change status Cancel
Status: In Progress		Status: Postponed
Tracker: Activity		Tracker: Activity
Assigned to:Ingus Smits		Assigned to:Ingus Smits
Priority:Normal		Priority:High
Done ratio:		Done ratio:
Change by: [+10%]		Change by: [+10%] [-10%]
Mark as:	Postponed In progress Resolved	

#### Mobile frontend add task

Innovative Strategic Partnership for European Higher Educatio	New task:
PENE	Туре
Tasks	Activity Issue Deliverable Metric Risk
testing or BEP platform testing lucational case	Procurement Change Request Review Requirement

#### Mobile frontend new task screen

ean Higher Educatio	New task:	
علما	Issue	•
	Status	
	Status: New	· · · · · · · · · · · · · · · · · · ·
	In Progress	
	Resolved	
	Feedback	
	Closed	
	Rejected	
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Э	Postponed	
	Delivered	
	Accepted	
	Monitoring	
	Analysis	
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	Occurred	
	Preparation	
	Announced	
· · · · · · · · · · · · · · · · · · ·	Evaluation	
Cooperation	Removed	
	Approved	-
duct		Create task Cancel

#### Mobile frontend new task screen

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85.3													
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Hig	gh										•		
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	art date			hor 201			100 State 1				4		
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		N	oveml		6	Fri 04	100 State 1						
E	Sun	N Mon	oveml Tue	ber 201 Wed	6 Thu	Fri	Sat	Crea	te task	Canco			
E	Sun 30	N Mon 31	oveml Tue 01	Wed 02	6 Thu 03	Fri 04	Sat 05	Crea	te task	Cance			
E 44 45	Sun 30 06	N Mon 31 07	oveml Tue 01 08	02 09	6 Thu 03 10	Fri 04 11	Sat 05 12	Crea	te task	Canco			

#### Performed quality assurance testing

Identification of web browser compatibility

Link validation

Styles validation

Form validation

Email notification validation

**Plugin validation** 

Validating accessibility

Code validation (W3C standards)

Localization validation



# Thank you