

IT- 414 Software project management
Group - 3

Open Project : Software Project Management Tools
User Manual

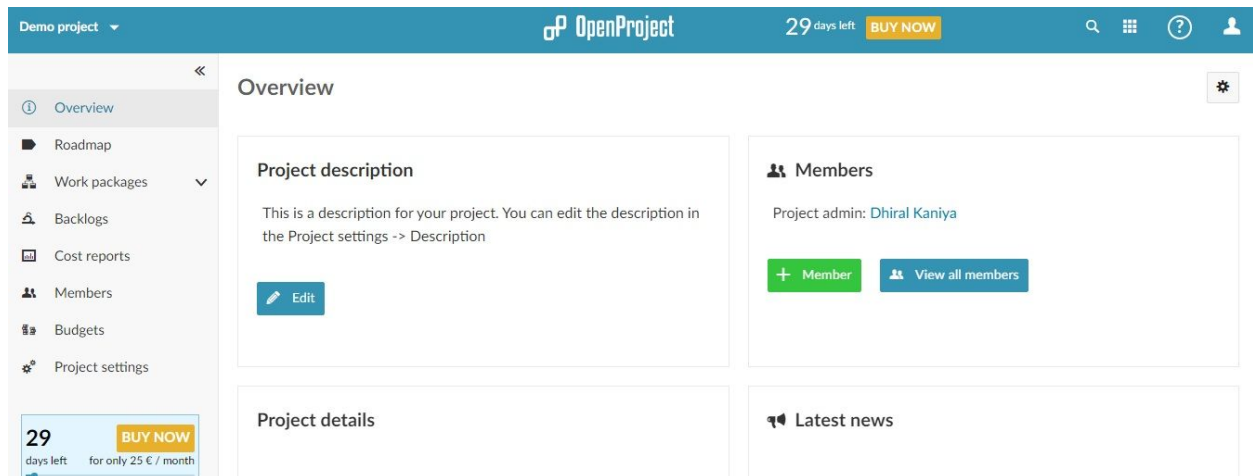
★ **About the Open Project tool :-**

- Open Project is a free open source web application for a project collaboration and manage project at once place. Open project stand alone application for project planning.
- OpenProject is established 2012 in Berlin, Germany by openproject foundation.
- OpenProject first version was launched in october 2012 and latest stable version 7.2.1 was launched in August 2017.
- OpenProject is released under the GNU General Public Licence, which guarantees to the end user freedom to run, study, share and modify the software/web-based application.
- OpenProject is developed using Angularjs and Ruby-Rails programming languages.
- Team openproject is also share their code on open source platform github and invite collaborator for contribute.(Link :- <https://github.com/opf/openproject>).

❖ Features :-

1. Overview :-

- Overview describes project definition, news feed of project, project details and current working member details.
- Only project admin have rights to manage project details and definition of the project.



2. Roadmap :-

- Roadmap describe the version of the project along with their issue and their details. Basically active roadmap can be considered as success key of the project. Example of roadmap is given below.

Roadmap

7.3.2

1 closed (10%) 9 open (90%) 10% Total progress

▼ RELATED WORK PACKAGES

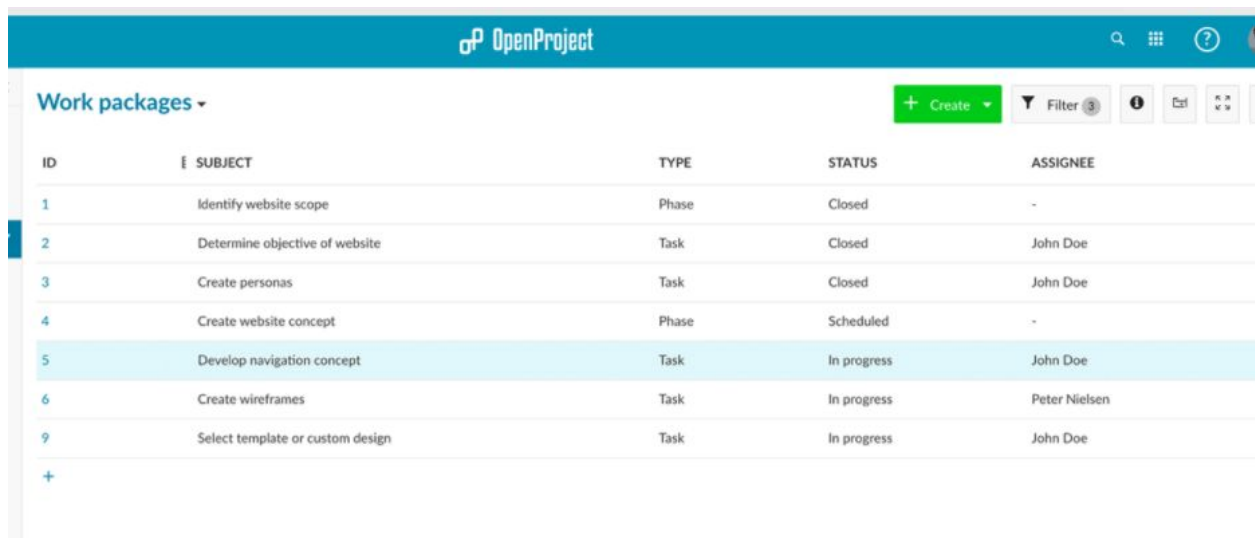
7.4.0

Start date 10/04/2017 Due date 12/13/2017

Due in 38 days

6 closed (10%) 56 open (90%) 10% Total progress

3. WorkPackages :-

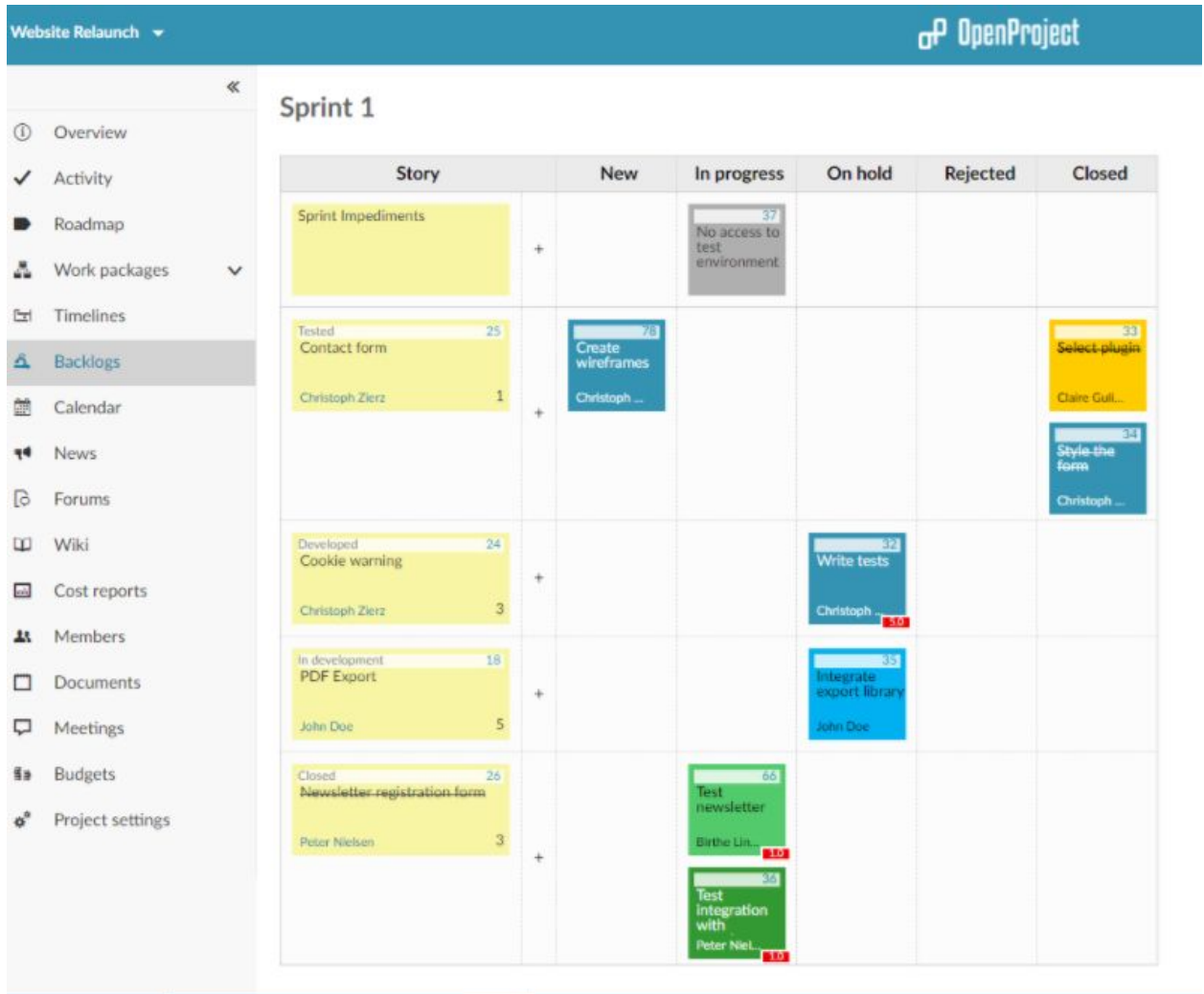


The screenshot displays the OpenProject interface for managing work packages. The header bar is blue with the OpenProject logo and navigation icons. Below the header, the 'Work packages' section is visible, featuring a '+ Create' button and a 'Filter' dropdown. The main content is a table with the following columns: ID, SUBJECT, TYPE, STATUS, and ASSIGNEE. The table lists seven work packages, with the fifth one, 'Develop navigation concept', highlighted in light blue. A '+' icon is located at the bottom left of the table area.

ID	SUBJECT	TYPE	STATUS	ASSIGNEE
1	Identify website scope	Phase	Closed	-
2	Determine objective of website	Task	Closed	John Doe
3	Create personas	Task	Closed	John Doe
4	Create website concept	Phase	Scheduled	-
5	Develop navigation concept	Task	In progress	John Doe
6	Create wireframes	Task	In progress	Peter Nielsen
9	Select template or custom design	Task	In progress	John Doe

- Work Packages is all about the work that has been assigned to the members.
- In addition to that, it covers summary of the task, bugs, milestone, phases, timeline and user stories that helps to manage task distribution at one place.
- Work Packages module also covers generating the report by exporting or saving in different format.
- In addition to that, it covers filter feature for assigned works.

4. Backlogs :-



The screenshot displays the OpenProject interface for a project named "Website Relaunch". The left sidebar contains a navigation menu with options: Overview, Activity, Roadmap, Work packages, Timelines, Backlogs (selected), Calendar, News, Forums, Wiki, Cost reports, Members, Documents, Meetings, Budgets, and Project settings. The main area shows "Sprint 1" with a Kanban board. The board has columns for Story, New, In progress, On hold, Rejected, and Closed. The Story column lists several items with their status, priority, and assigner. The New, In progress, and Closed columns contain task cards with their status, priority, and assigner.

Story	New	In progress	On hold	Rejected	Closed
Sprint Impediments		37 No access to test environment			
Tested Contact form 25 Christoph Zierz 1	7/8 Create wireframes Christoph ...				33 Select plugin Claire Gull... 34 Style the form Christoph ...
Developed Cookie warning 24 Christoph Zierz 3			32 Write tests Christoph ... 30		
In development PDF Export 18 John Doe 5			35 Integrate export library John Doe		
Closed Newsletter registration form 26 Peter Nielsen 3		60 Test newsletter Birthe Lin... 50 55 Test integration with Peter Niel... 50			

- For effective work in Scrum teams is a well-maintained and prioritized product backlog as well as the creation of sprint backlogs.
- In OpenProject, you can easily record and specify requirements represented by user stories. Moreover, you can respond to inquiries and sort them by priority for implementation.
- Backlogs provide to create new backlog, user stories, prioritizing task and working for particular story point along with timeframe.

5. Budget :-

COST REPORTS

BUDGETS

Budgets

+ Add budget

# ↓	SUBJECT	PLANNED	SPENT	AVAILABLE	SPENT (RATIO)
3	Budget 2017 Q2	9,600 EUR	0 EUR	9,600 EUR	<div><div></div></div> 0% Total progress
2	Budget 2017 Q1	20,000 EUR	1,760 EUR	18,240 EUR	<div><div></div></div> 9% Total progress
1	Budget 2016 Q4	20,000 EUR	7,420 EUR	12,580 EUR	<div><div></div></div> 37% Total progress
		49,600 EUR	9,180 EUR	40,420 EUR	

(1 - 3/3)

Per page: 20 100

- Budget is basically used to manage budget for particular project at individual level.
- We can assign cost to the particular member in the Openproject who are responsible to increase or decrease the project cost amount along with file.

6. Cost Report :-

^ GROUP BY

Columns

Month (Spent) x

Week (Spent) x

-- Add Group-by Attribute -- ▼

Rows

User x

Work package x

-- Add Group-by Attribute -- ▼

▼ UNITS

Apply

Save

Save report as...

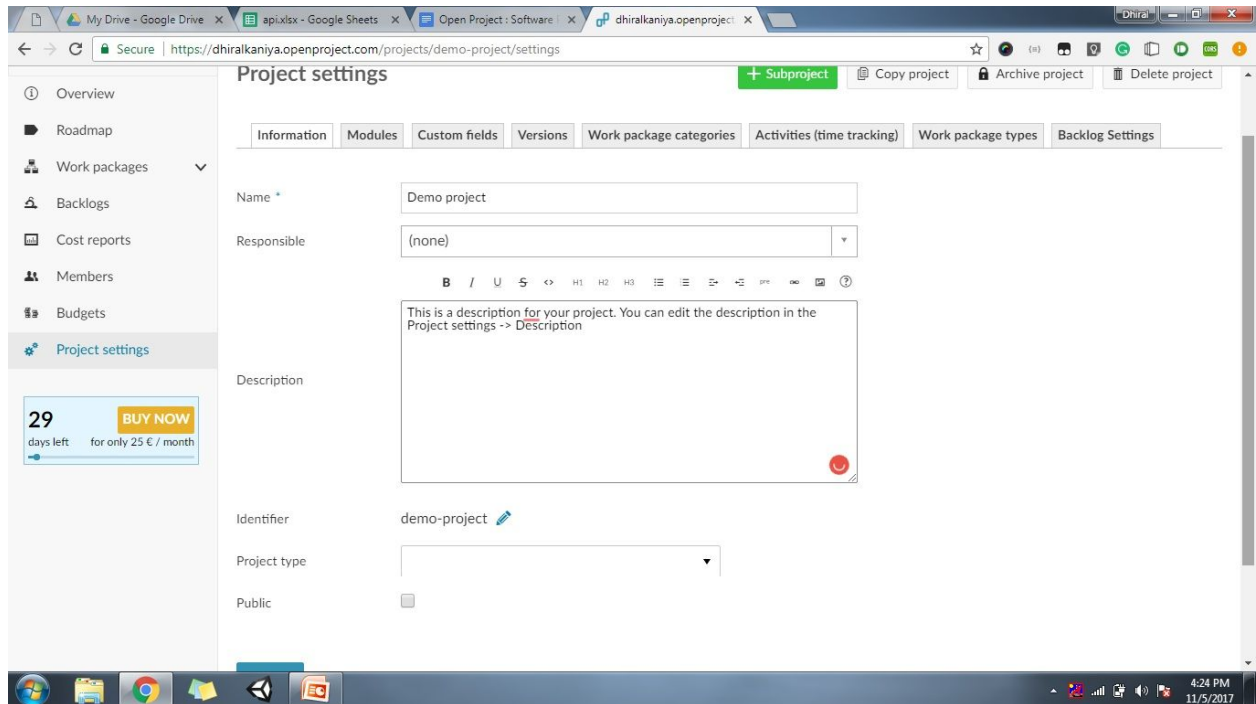
Clear

Delete

		August		September		October			
		Week #32	Week #33	Week #36	Week #38	Week #40	Week #43		
John Doe	Phase #1: Identify website scope			2.00 hours				2.00 hours	27.00 hours
	Task #3: Create personas					12.00 hours		12.00 hours	
	Milestone #7: Website concept ready			5.00 hours				5.00 hours	
	Task #8: Choose hosting provider			8.00 hours				8.00 hours	
Claire Gullivan	User story #26: Newsletter registration form		8.00 hours					8.00 hours	14.00 hours
	User story #29: SEO optimized footer	2.00 hours						2.00 hours	
	Task #36: Test integration with newsletter tool		4.00 hours					4.00 hours	
Peter Nielsen	Task #2: Determine objective of website				3.00 hours			3.00 hours	36.00 hours
	Task #3: Create personas						6.00 hours	6.00 hours	
	Task #6: Create wireframes		5.00 hours					5.00 hours	
	User story #31: Availability calendar				22.00 hours			22.00 hours	
		2.00 hours	17.00 hours	15.00 hours	25.00 hours	12.00 hours	6.00 hours		77.00 hours
		19.00 hours		40.00 hours		18.00 hours			

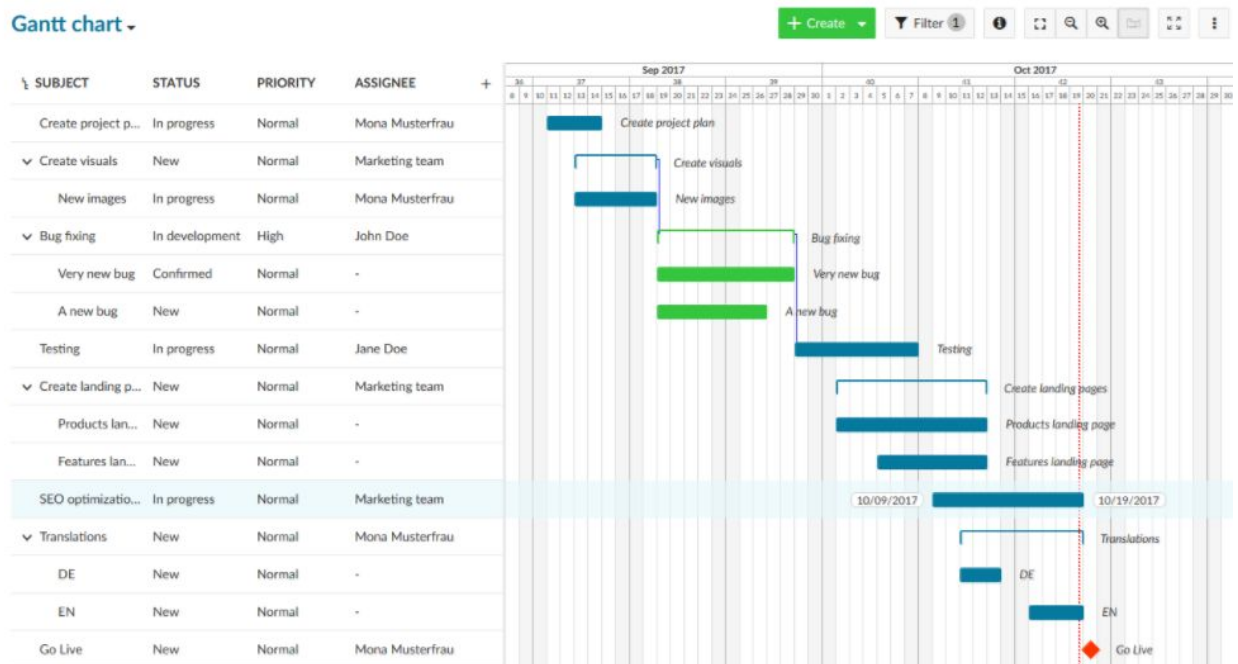
- Assigning a work package to a budget requires installation of the costs plugin.
- The budget page is only available when the Budget module has been activated in the project settings.
- In order to assign a work package to a budget select a work package, click the *Show all* button, click on the budget and assign a value from the dropdown menu. You can assign several work packages to the same budget.

7. Project Setting :-



- Every project can be individually adjusted, with different functionalities being activated or deactivated, differing project members, customized roles and workflows. Depending on the role you have, you may or may not be able to do this.
- To do that select Project settings at the bottom of the project menu and select the tab you want to adapt.

8. Gantt Chart :-



- Using this feature we can create a project management plan that shows how and when the project team will deliver the work packages and according milestones defined in the project scope.
- Display multiple projects in one gantt chart and highlight changes to the project schedule.

9. Calendars :-

Calendar

▼ FILTERS

Month: Year: [Apply](#)

September | November

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
39	25	26 Bug #366: A new bug	27	28 Bug #277: Very new bug Bug #271: Bug fixing	29 This is a new project name This is a new project name - Sprint 2 Task #367: Testing	30	1
40	2 Task #369: Products landing page Task #368: Create landing pages	3	4	5 Task #370: Features landing page	6	7 Task #367: Testing	8
41	9 Task #371: SEO optimization	10	11 Task #373: DE Task #372: Translations	12 Task #369: Products landing page Task #370: Features landing page Task #368: Create landing pages	13 Task #373: DE	14	15
42	16 Task #374: EN	17	18	19 Task #374: EN Task #372: Translations Task #371: SEO optimization	20 Milestone #375: Go Live	21	22
43	23	24	25	26	27	28	29

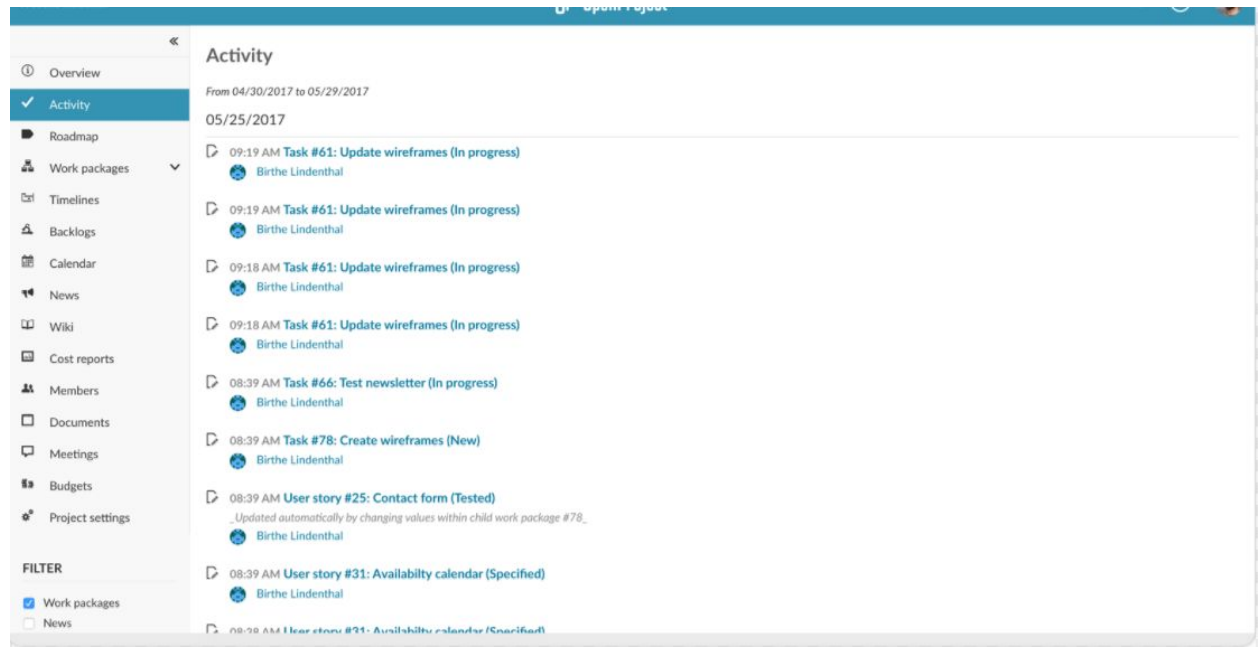
- Using this feature we can abstractly overview of all the work done in the whole month.
- We can see the which task has started this month which task is completed this month.

10. Issue Tracking :-

The screenshot displays the OpenProject web interface. The top navigation bar includes the 'Website Relaunch' dropdown, the 'OpenProject' logo, and search, settings, and user profile icons. A left sidebar lists navigation options: Overview, Activity, Roadmap, Work packages (selected), Summary, Bugs, Milestones, Phases, Tasks, User Stories, Timelines, Backlogs, Calendar, News, Wiki, Cost reports, Members, Documents, and Meetings. The main content area is titled 'Task: Align and document project scope' and shows 'Work package #20: Created by Christoph Zierz. Last updated on 05/24/2017 12:31 PM.' Below this, a table lists project details: Project (Website Relaunch), Status (In progress), and a description with bullet points: 'Identify the scope of the new website:', 'Determine objective of website (#2)', 'Create personas (#3)', and 'Prepare documentation based on template.' The 'PEOPLE' section shows the assignee as 'Claire Gullivan'. The 'DETAILS' section shows the date range '05/31/2017 - 06/11/2017', priority 'Normal', progress '50% Total progress', and version 'Beautiful product v2.2'. A file upload area at the bottom prompts to 'Drop files here or click to add files'. On the right, a 'WATCHERS' section lists activity for September 21, 2016, with five entries showing updates and changes by Christoph Zierz and Peter Nielsen.

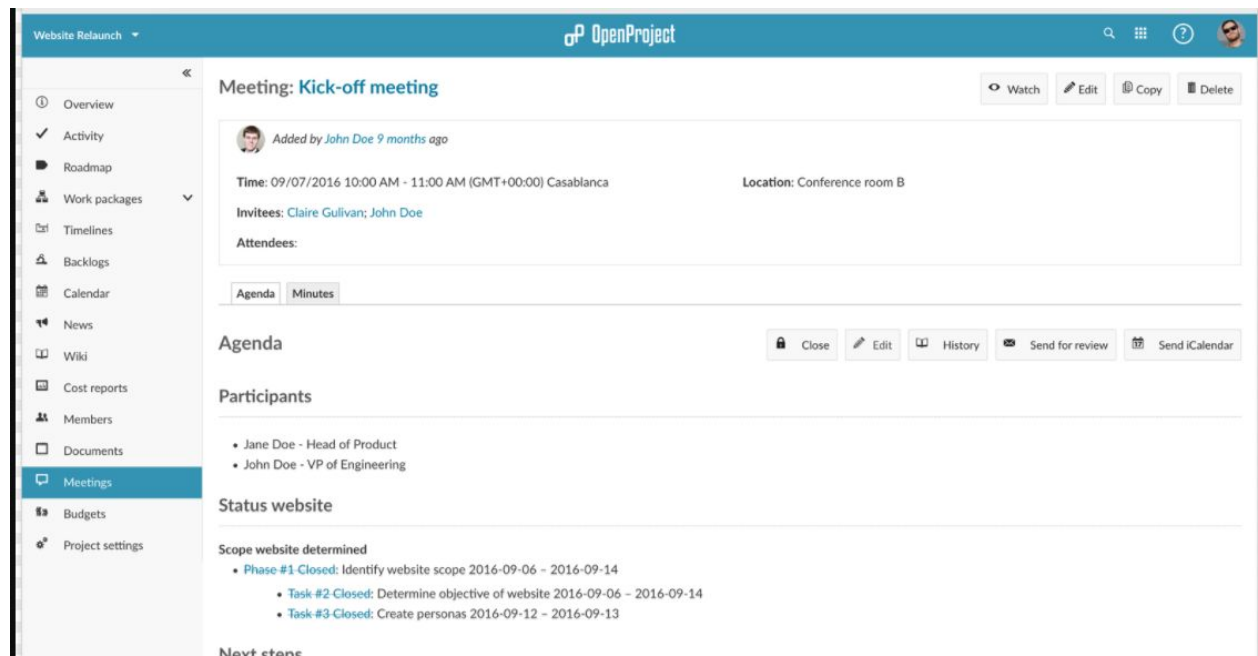
- To Manage all project tasks, deliverables and activities we can use this feature.
- To Stay on top of every possible issue - tasks, risks, features, bugs and much more - with the ability to define separate workflows and custom fields to adapt OpenProject to our specific needs. All information and communication available at one place.

11. Activity Streams :-



- To track project activities we can use this feature.
- We can get instant status reports.
- We can get a real time feed of all project activities and get a quick overview of all important changes.

12. Metting :-



- We can do Effective planning and documentation of project meetings
- We can use meetings to manage agendas and minutes and inform project members about the latest developments.
- We can Link tasks and send email notifications to participants.

13. Agile and Scrum :-

The screenshot displays the OpenProject interface for 'Website Relaunch'. The left sidebar contains navigation options: Overview, Activity, Roadmap, Work packages, Timelines, Backlogs (selected), Calendar, News, Wiki, Cost reports, Members, Documents, Meetings, Budgets, and Project settings. The main area shows 'Sprint 1' with a Kanban board. The board has columns for Story, New, In progress, On hold, Rejected, and Closed. Tasks are represented as cards with titles, assignees, and progress indicators.

Story	New	In progress	On hold	Rejected	Closed
Sprint Impediments + 25 Christoph Zierz 1		No access to test environment 37			
Tested Contact form 25 Christoph Zierz 1	Create wireframes 78 Christoph ...				Select plugin 33 Claire Gull... Style the form 35 Christoph ...
Developed Cookie warning 24 Christoph Zierz 3			Write tests 23 Christoph ...		
In development PDF Export 18 John Doe 5			Integrate export library 35 John Doe		
Specified Newsletter registration form 26 Peter Nielsen 3		Test newsletter 66 Birthe Lin... Test integration with 36 Peter Niel...			

- We can use this feature to update tasks with drag and drop
- We can use the task board to break deliverables into individual tasks and update their status with drag and drop.

In addition to that OpenProject is also provide help, profile management, modules management and searching facilities for individual project. OpenProject is also used to manage multiple project at the same time.

❖ How to install OpenProject in our system ?

- OpenProject provide web-based and software based platform for user to working of. For web-based project just reach on their website then create account(if you have google account then you can use it.)
- For Ubuntu installation steps are as follow(There are various installation processes are available but we prefer ubuntu 14.04 or greater version installation).

★ Manual Installation steps :-

Step 1:- Import the packager.io repository signing key

```
wget -qO- https://dl.packager.io/srv/opf/openproject-ce/key | sudo apt-key  
add -
```

Step 2:- Add the OpenProject package source

```
sudo          wget          -O          /etc/apt/sources.list.d/openproject-ce.list  
https://dl.packager.io/srv/opf/openproject-ce/stable/7/installer/ubuntu/14.04.repo
```

Step 3:- Install the OpenProject Community Edition package

```
apt-get update  
apt-get install openproject
```

- **For Configuration please follow below steps.**

```
sudo openproject config:set SESSION_STORE=active_record_store
```

- **For Customization please follow below steps.**

Step 1. Add a custom Gemfile

```
gem          'openproject-emoji',          git:  
'https://github.com/tessi/openproject-emoji.git', :branch => 'op-5-stable'
```

Step 2. Propagate the Gemfile to the package

```
openproject config:set  
CUSTOM_PLUGIN_GEMFILE=/etc/openproject/Gemfile.custom
```

Step 3. Rerun the installer

Open project configure

❖ How Open Project is different from Other tools ?

★ Comparison between OpenProject and Jira :-

- Jira is a proprietary software. Therefore, users run the risk of depending solely on the vendor to make code adjustments / implementing feature requests. Additionally, Jira is quite complex to use and the cloud service is quite slow.
- While Jira offers a lot of features, many functionalities are only available available through external plugins (such as the Gantt chart). Therefore, those external plugins need to be purchased and can get quite expensive.
- Feature Wise Comparison of OpenProject and Jira is given.

Features	OpenProject	Jira
Issue Tracking / Task Management	✓	✓
Fast inline issue creation/update	✓	✓
Timeline / Gantt chart	✓	✓
Time and Cost tracking	✓	✓
Product Roadmap	✓	✓
Meetings	✓	✓
Repository	✓	✓
Forums	✓	✓
Mobile-friendly layout	✓	✓
Modern design	✓	✓
Single-page application	✓	✓
Open source	✓	

★ Comparison between OpenProject and Wrike:-

- OpenProject and Wrike both offer classical project management features. However, OpenProject also includes code management integrations through repositories and release management through product roadmap
- Wrike is not open source. Wrike also offers no self-hosted version. Additionally, Wrike does not have an integrated source control management feature which makes it difficult for software projects to be managed in an integrated way. On the other side OpenProject does have this functionalities.
- Feature Wise Comparison of OpenProject and Wrike given.

Features	OpenProject	Wrike
Issue Tracking / Task Management	✓	✓
Fast inline issue creation/update	✓	✓
Timeline / Gantt chart	✓	✓
Time and Cost tracking	✓	✓
Product Roadmap	✓	
Meetings	✓	
Repository	✓	
Forums	✓	
Mobile-friendly layout	✓	✓
Modern design	✓	✓
Single-page application	✓	✓
Open source	✓	

★ Comparison between OpenProject and Trello:-

- OpenProject allows release management through product roadmap. Additionally, OpenProject makes communication easy: You can organize meetings directly within OpenProject and manage forums. While on other side Trello does not support this features.
- Unfortunately Trello's advantages (simplicity, Kanban view) make often make it difficult to use in business environments. Trello lacks many enterprise project management features, such as Gantt charts, time and cost tracking. and the fact that there is no self-hosted version of Trello. Trello also does not support meeting organization. OpenProject on the other hand provides self-hosting through the Enterprise Edition. Software development companies will also miss an integrated source control management system in Trello which is helpful to easily coordinate development progress.
- Feature Wise Comparison of OpenProject and Trello given.

Features	OpenProject	Trello
Issue Tracking / Task Management	✓	✓
Fast inline issue creation/update	✓	✓
Timeline / Gantt chart	✓	
Time and Cost tracking	✓	
Product Roadmap	✓	
Meetings	✓	
Repository	✓	
Forums	✓	
Mobile-friendly layout	✓	✓
Modern design	✓	✓
Single-page application	✓	✓
Open source	✓	

★ Comparison between OpenProject and Redmine:-

- OpenProject is historically a successor of Redmine but uses a more modern technology and a more user-friendly, up-to-date design.
- Instead of a traditional web application, OpenProject is a modern single-page application
- Users can for example create and edit issues with a single click while Redmine requires multiple steps to accomplish the same.
- The same is true for adding new members to a project: In Redmine you need to create a new user in the administration screen. Then you need to add the user to the project. OpenProject allows to do both in one step.
- OpenProject also offers a modern, dynamic Gantt chart which is very user-friendly and integrated in the work package page. Redmine on the other hand includes an old timeline which requires many page reloads to update.

Features	OpenProject	Redmine
Issue Tracking / Task management	✓	✓
Fast inline issue creation/update	✓	
Timeline / Gantt chart	✓	✓
Time and Cost tracking	✓	✓
Product Roadmap	✓	✓
Meetings	✓	✓
Repository	✓	✓
Forums	✓	✓
Mobile-friendly layout	✓	
Modern design	✓	
Single-page application	✓	
Open source	✓	✓

★ Comparison between OpenProject and Liquidplanner :-

- OpenProject and LiquidPlanner both offer classical project management features. However, OpenProject also allows release management through product roadmap. Additionally, you can communicate easily: You can organize meetings directly within OpenProject and manage forums.
- LiquidPlanner is not open source, meaning users run the risk of depending solely on the vendor to make code adjustments / implementing feature requests. LiquidPlanner offers no self-hosted version. Additionally, LiquidPlanner does not have an integrated source control management feature. This makes it difficult for software projects to be managed in an integrated way.
- Feature Wise Comparison of OpenProject and Liquidplanner given.

★ Comparison between OpenProject and Basecamp :-

- OpenProject and Basecamp both offer classical project management features.

Features	OpenProject	LiquidPlanner
Issue Tracking / Task Management	✓	✓
Fast inline issue creation/update	✓	✓
Timeline / Gantt chart	✓	✓
Time and Cost tracking	✓	✓
Product Roadmap	✓	
Meetings	✓	
Repository	✓	
Forums	✓	
Mobile-friendly layout	✓	✓
Modern design	✓	✓
Single-page application	✓	✓
Open source	✓	

However, OpenProject also allows release management through product roadmap

- Basecamp misses several critical project management features, such as Gantt charts for effective planning and progress visualization. In addition, it does not offer time and cost tracking, source code management integration or custom workflows. Basecamp also offers no self-hosted version for Basecamp which would enable on-premise deployments. OpenProject on the other hand provides self-hosting through the Enterprise Edition.

Features	OpenProject	Basecamp
Issue Tracking / Task Management	✓	✓
Fast inline issue creation/update	✓	
Timeline / Gantt chart	✓	
Time and Cost tracking	✓	
Product Roadmap	✓	
Meetings	✓	✓
Repository	✓	
Forums	✓	✓
Mobile-friendly layout	✓	✓
Modern design	✓	
Single-page application	✓	
Open source	✓	

➤ Feature Wise Comparison of OpenProject and Basecamp given.

★ References :-

- <https://www.openproject.org/>
- <https://en.wikipedia.org/wiki/OpenProject>
- <https://github.com/opf/openproject>