

Applied informatics

Creating and standardization of a project
and interpretation of fundamental factors of
the project management - CPM.

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Creating and standardization of a project and interpretation of fundamental factors of the project management - CPM.

1. Modification and interpretation of fundamental factors of project management.
2. Creation and standardization of projects in a selected SW.
3. Specification of fundamental requirements on the project – part of the case study.
4. Assignments.

Aims of the exercise



1. Introduce and explain fundamental terms of modification and the creation of plans.
2. Transfer the basic information about the „Creation and standardization of projects in a selected SW“.
3. Explain the creation of the project
 - Division into teams, assignment of roles.

Project as a Verne-book?

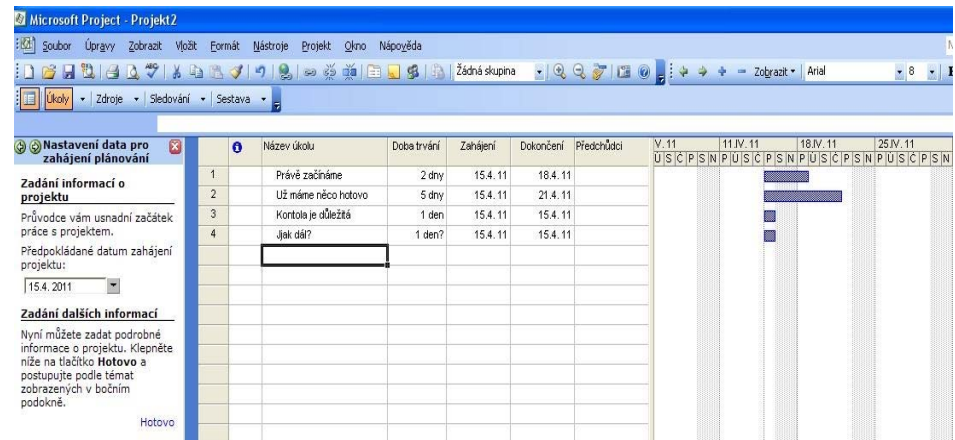
- The first pioneer of project management was the French writer of science fiction novels.
- The first was the famous novel "Five weeks in a balloon" (1863), followed by more than 60 other works.
- His account of unknown and exotic landscapes, and descriptions of techniques dream of the future, the famous Verne books, influenced millions of readers worldwide and future inventors, and designers. [3]
- "The country does not need new continents, it needs new people."



Jules Verne
(1828 - 1905)

Modification and interpretation of fundamental factors of project management

- Successful project management - depends not only on the following principles - especially on good time management.
- The following tips may seem simple and obvious, but especially for larger projects it may be difficult to observe all.
- To put the project in danger it is sufficient to violate just one of them. [1]



Principles of successful projects

objectives of the project

- Why should the project succeed; if the project is viable or whether there are any better alternatives;

support authority

- Must be clear from the outset to support a project sponsor, including its obligations to supply the necessary resources (money, people, time management, etc.);

fellow workers

- The key to the outcome and therefore it is important to choose wisely;

powers and responsibilities

- A clear division of powers and responsibility (elected manager is responsible for the project coordination. [2])

Principles of successful projects

- quality monitoring - identify the requirements on quality - monitoring of developments during the project (write the checks carried out by the contracting authority - their authorization);
- division into stages - projects are divided into easily measurable and achievable sections;
- Planning - larger, more complex plans - rough planning of the project - detailed planning components; plan economically - better be good today than perfect tomorrow;

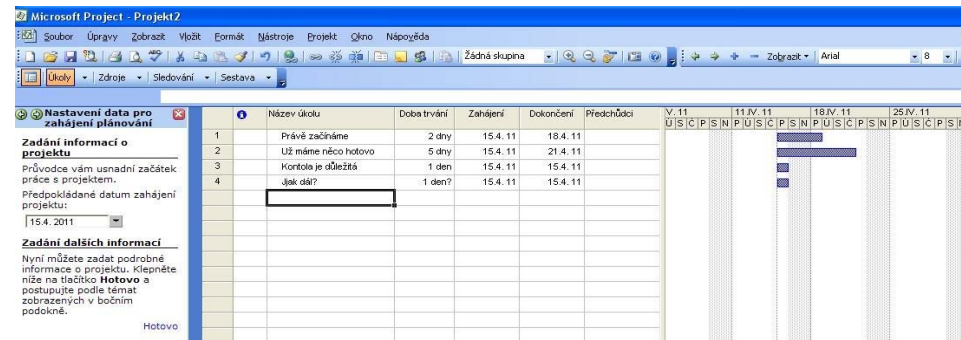
Principles of successful projects

- monitoring contexts and personal commitment
- Documentation - memory is not enough, need clear documentation
 - better overview and the possibility of returning to the project;
- completion and handover - the successful completion of the project
- pass on the full documentation and results of the project (such as the use or operation);
- Final Recap - of each completed project, try to learn as much as possible and never not repeat the same mistakes.

Tools for the solution

Microsoft Project

- is a powerful and flexible tool to manage both simple and complex projects.
- It allows you to plan and track all activities and control the progress.
- In newer versions the program allows a group scheduling and data transfer to OIS.



Tools for the solution

OpenProject

- is a powerful and flexible tool to manage both simple and complex projects.
- Allows you to plan and monitor all activities and check their progress.

The same as with MS Project.

With 95% efficiency of MS Project it is a free and supports multitasking. Critical path is active and visible.

OpenProject – how to create a plan

- Create a plan when opening the program
- Insert basic information.

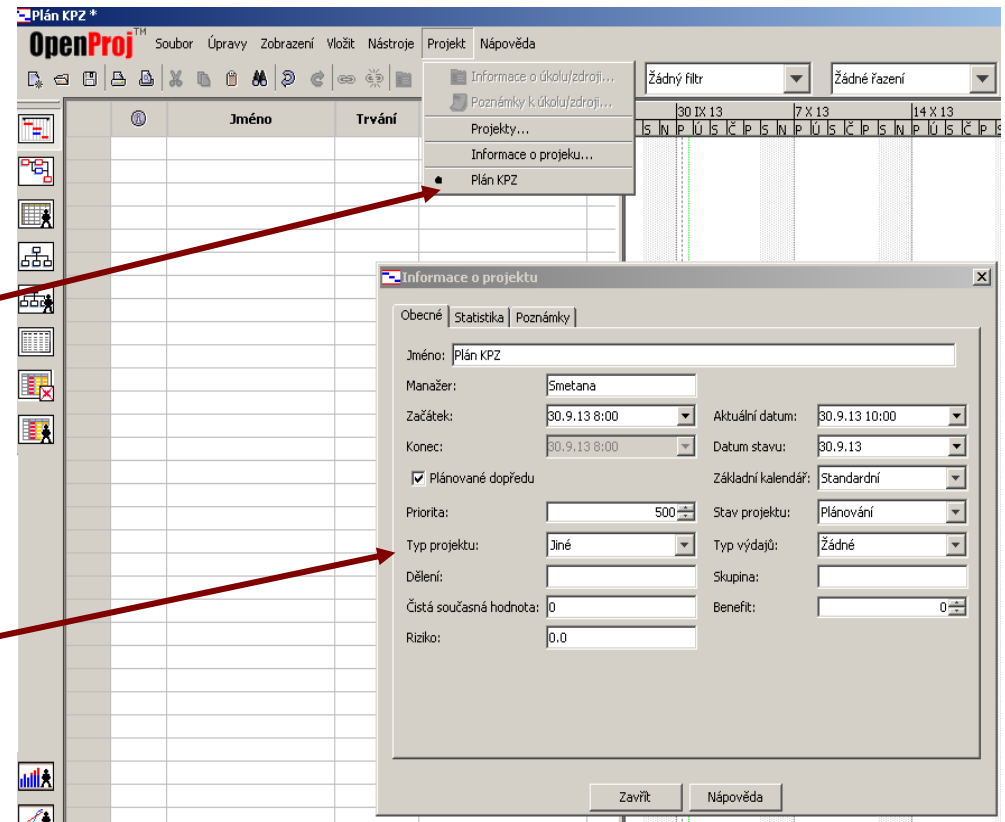
The screenshot shows a Windows-style dialog box titled "Nový projekt". It contains the following fields and controls:

- Název projektu:** A text box containing "Plán KPZ".
- Manažer:** A text box containing "Smetana".
- Datum začátku:** A date picker showing "30.9.13".
- Plánované dopředu:** A checked checkbox.
- Poznámky:** A large text area containing "Cvičební text projektu ESF".
- Buttons:** "OK", "Zrušit", and "Nápověda" at the bottom.

- Insert basic information about the plan creator.

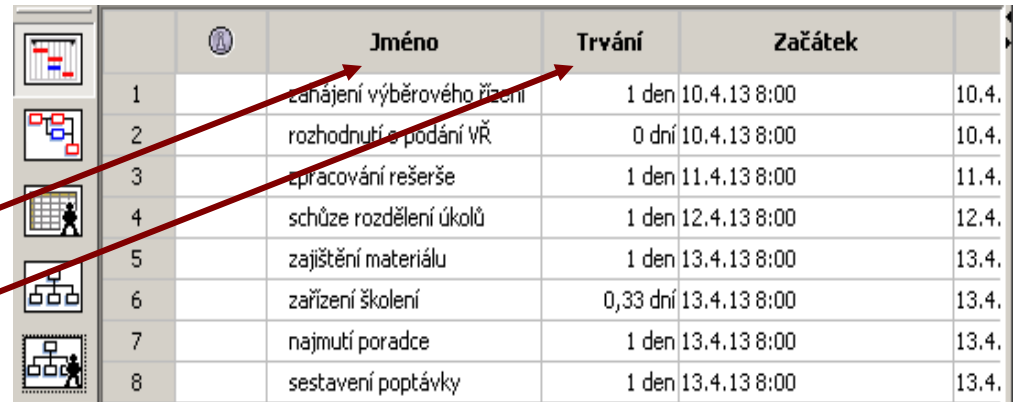
OpenProject – principles of plans

- Fine tune the beginning of the project plan – menu Project - „**Project information**“.
- Adjust other economical and technical parameters here – Project type, risk, ... **typ projektu, riziko...**



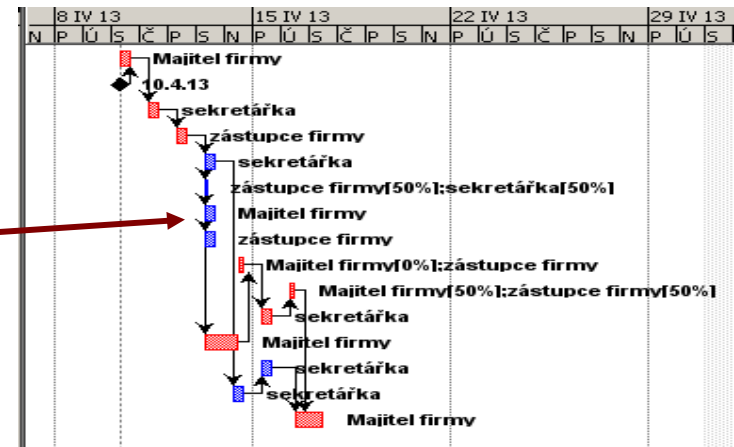
OpenProject – principles of plans

- Insert task names (“Name”) and the duration in the Gantt chart.



		Jméno	Trvání	Začátek	
1		zahájení výběrového řízení	1 den	10.4.13 8:00	10.4.
2		rozhodnutí a podání VŘ	0 dní	10.4.13 8:00	10.4.
3		zpracování rešerše	1 den	11.4.13 8:00	11.4.
4		schůze rozdělení úkolů	1 den	12.4.13 8:00	12.4.
5		zajištění materiálu	1 den	13.4.13 8:00	13.4.
6		zařízení školení	0,33 dní	13.4.13 8:00	13.4.
7		najmutí poradce	1 den	13.4.13 8:00	13.4.
8		sestavení poptávky	1 den	13.4.13 8:00	13.4.

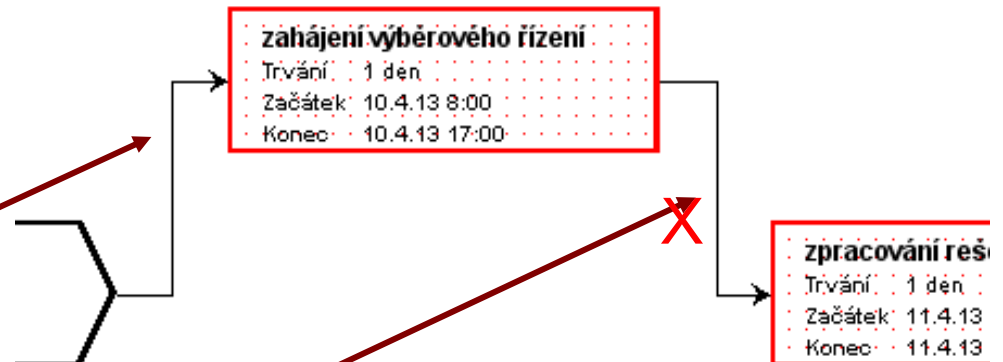
- Relationships can be created also in the chart.



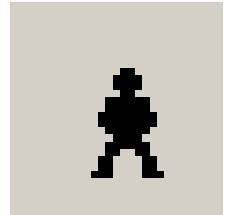
OpenProject – principles of plans

- Create a logical structure: Drag in a network diagram with the mouse – from the predecessor towards the successor.

- The link can be cancelled by clicking on a connector ...

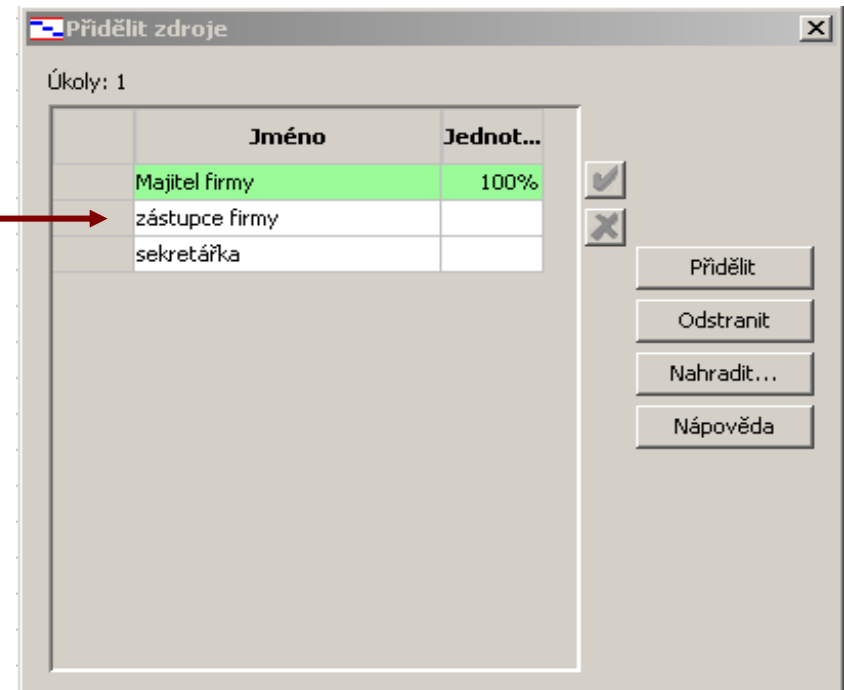


Resource allocation



•In the Gantt Chart menu, select the icon to assign resources to tasks ...

•Select the source, then you can edit the source in the source list ...



Calendar modification

- In the Tools menu via the "Changes to working time", you can modify working days ...
- and create a work calendar.

Změnit pracovní čas

Pro: Standardní

☒ Použít předvolené
☐ Nepracovní čas
☐ Nestandardní pracovní ...

Od: Komu:

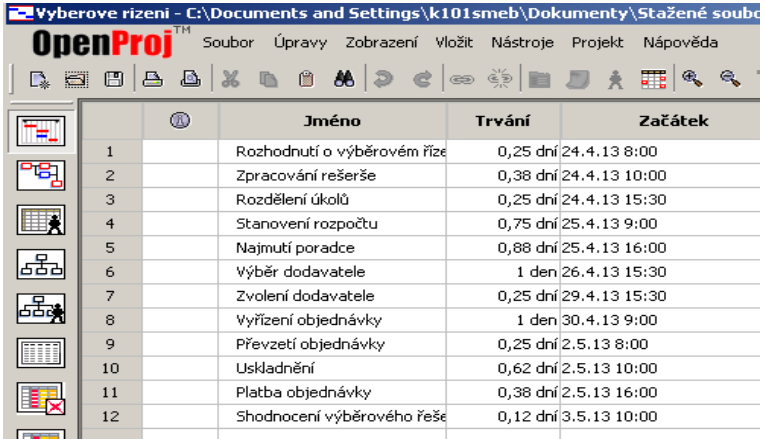
říjen 2013 listopad 2013
 N P Ú S Č P S N P Ú S Č P S
 1 2 3 4 5 1 2
 6 7 8 9 10 11 12 3 4 5 6 7 8 9
 13 14 15 16 17 18 19 10 11 12 13 14 15 16
 20 21 22 23 24 25 26 17 18 19 20 21 22 23
 27 28 29 30 31 24 25 26 27 28 29 30

 prosinec 2013 leden 2014
 N P Ú S Č P S N P Ú S Č P S
 1 2 3 4 5 6 7 1 2 3 4
 8 9 10 11 12 13 14 5 6 7 8 9 10 11
 15 16 17 18 19 20 21 12 13 14 15 16 17 18
 22 23 24 25 26 27 28 19 20 21 22 23 24 25
 29 30 31 26 27 28 29 30 31

Nový... Možnosti... OK Zrušit nápověda

Plan: the assignment

- The aim of this study is within the framework of the implementation team to plan the use of tools for security, organization and data protection within the team. The environment is chosen in terms of "your future career focus."
- The project consists of a series of components that form a whole - a complex job.
- At first glance, the study is simple, but just until the moment when you realize every aspect of the complex job.



The screenshot shows the OpenProj software interface. The title bar reads "Vyberové řízení - C:\Documents and Settings\k101smeb\Dokumenty\Stážené soubor...". The menu bar includes "Soubor", "Úpravy", "Zobrazení", "Vložit", "Nástroje", "Projekt", and "Nápověda". The toolbar contains various icons for project management. The main window displays a table with 12 rows of project tasks.

	Jméno	Trvání	Začátek
1	Rozhodnutí o výběrovém říze	0,25 dní	24.4.13 8:00
2	Zpracování rešerše	0,38 dní	24.4.13 10:00
3	Rozdělení úkolů	0,25 dní	24.4.13 15:30
4	Stanovení rozpočtu	0,75 dní	25.4.13 9:00
5	Najmutí poradce	0,88 dní	25.4.13 16:00
6	Výběr dodavatele	1 den	26.4.13 15:30
7	Zvolení dodavatele	0,25 dní	29.4.13 15:30
8	Vyřízení objednávky	1 den	30.4.13 9:00
9	Převzetí objednávky	0,25 dní	2.5.13 8:00
10	Uskladnění	0,62 dní	2.5.13 10:00
11	Platba objednávky	0,38 dní	2.5.13 16:00
12	Shodnocení výběrového řeše	0,12 dní	3.5.13 10:00

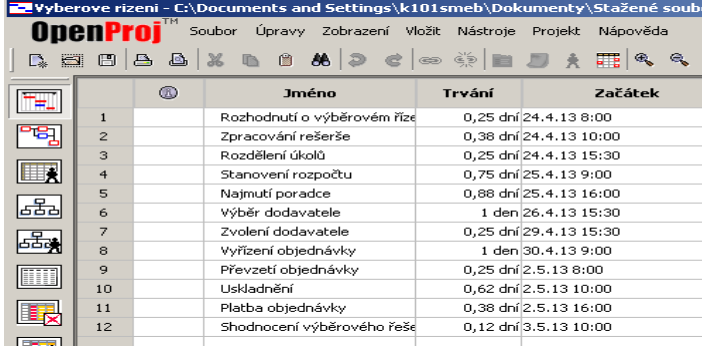
Plan: the assignment

Introduction to the problem:

An experienced professional should be able to handle smaller projects and select an appropriate strategy, obtain information, plan and defend his intent.

The path leads from data mining through search to a dynamic plan with team focus and its reflection into OIS, including the protection of data.

Think not only about the challenges but also who will be in the environment of your future career, including a timetable ...



The screenshot shows the OpenProj software interface. The title bar indicates the file path: C:\Documents and Settings\k101smeb\Dokumenty\Stážené soubor. The menu bar includes Soubor, Úpravy, Zobrazení, Vložit, Nástroje, Projekt, and Nápověda. The toolbar contains various icons for project management. The main window displays a table with the following data:

	Jméno	Trvání	Začátek
1	Rozhodnutí o výběrovém říze	0,25 dní	24.4.13 8:00
2	Zpracování rešerše	0,38 dní	24.4.13 10:00
3	Rozdělení úkolů	0,25 dní	24.4.13 15:30
4	Stanovení rozpočtu	0,75 dní	25.4.13 9:00
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9	Převzetí objednávky	0,25 dní	2.5.13 8:00
10	Ukládání	0,62 dní	2.5.13 10:00
11	Platba objednávky	0,38 dní	2.5.13 16:00
12	Shodnocení výběrového řeše	0,12 dní	3.5.13 10:00

Plan: the assignment

When planning the complex work we can make use of the recommendations:

Information on the Issues - search for the best objective information on the subject of our interest. The knowledge gained is always a good idea to write a structure, in the form of research.

Budgeting - how much will it costs? When the money will be available after what amounts? General requirement - for us just an extension of the project budget will be decisive time-consuming solution.

3rd Options retrieval, analysis

- Data mining (extraction of information). Necessary information to search for and assess their significance for complex work.

Plan: the assignment

We proceed roughly as follows:

First: Assembly required systemized place - accurate, or at least an approximate determination of entitlement to use, and data protection and information systems in the future career. We start from data mining of information obtained from publicly available sources.

Second: Market research using open source we determine the optimal economic framework for the requirements - Minimal costs and the maximum effect.

(Note: The **demand** is not good for suppliers because it forces them to reduce margins to a minimum.)

Plan: the assignment

We proceed roughly as follows:

3rd: Resource evaluation - In practice, it is necessary to evaluate the usefulness of found resources on the topic.

Apart from reading through a laborious evaluation of the resources can be used and analytical tools - Google Analytics, "IBM OmniFind Yahoo!" freeware or commercial Tovek Tools.

4th: Selecting a suitable SW and HW support - for the systemized place is to think about the information obtained from the appropriate HW and SW support. Besides the analysis of the information obtained should be used ingenuity and estimate the possible development of HW and SW.

5th: Pre-think about the plan first on paper - start time, subtasks, forces and means ...

Plan: an example

First on paper - into a
single table:
serial number,
subtasks
duration,
stage ensures (source) ...

= Example table: 

Stage (task) -
Duration (time unit) -
ENSURE (short) ...

SCÉNÁŘ:		TRVÁNÍ:	ZAJISTÍ(zdroje):
1.	Prvotní informace, vyhodnocení a svolání KŠ	20	KŠ
2.	Varování obyvatelstva – složky IZS	20	KŠ
x	Rozhodnutí starosty	0	mělník
3.	Svolání KŠ města	0	KŠ
4.	Zasedání KŠ – starosta – evakuace záplavových území	30	KŠ, starosta
5.	Přípravy shromaždišť	120	E/ES
6.	Aktivace shromaždiště a IZS	120	E/ES
7.	Informace občanům	20	Obyvatelstvo
8.	Evakuace školy a ZTP	120	Obyvatelstvo
9.	Zasedání KŠ – vyhodnocení plnění úkolů	150	KŠ
1.	Evakuační zavazadla	50	Obyvatelstvo
10.	Odvoz nebezpečných látek	280	Podniky
12.	Uzavření přívodů vody, plynu, elektřiny	30	Obyvatelstvo
13.	Evakuace majetku – převoz hodnotného majetku, PC, IT/IS	260	Podniky
14.	Monitoring situace KŠ	160	KŠ
15.	Opuštění domů – převoz do S/ES	50	Obyvatelstvo
16.	Činnost v S/ES	50	E/ES
17.	Zasedání KŠ – zhodnocení evakuace	50	KŠ
18.	Rozvržení osob v S/ES	20	KŠ
19.	Přesun osob do nouzové ubytovny	30	Obyvatelstvo
20.	Nouzové ubytování osob	90	Obyvatelstvo
21.	Nucená evakuace osob PČR, HZS	60	Obyvatelstvo
22.	Náhradní trasy MHD	60	KŠ
23.	Poučení o situaci a zákonných právech při evakuaci občanů.	90	Obyvatelstvo
24.	Zasedání KŠ/BR vyhodnocení	100	KŠ
25.	Stabilizace situace		

□

Assignments



Test the possibilities of OpenProject on your own computer.



Create a project and prepare the plan according to the team capabilities.



Search for sources and summarize them to create a summary of your research.

Resources:

1. BENDO VÁ, Klára. Základy projektového řízení. *Základy projektového řízení* [online]. 2012, č. 1 [cit. 2013-09-30]. Dostupné z: http://www.ff.upol.cz/fileadmin/user_upload/FF-katedry/psychologie/publikace/Bendova/Bendova_K_a_kol_zaklady_projektoveho_rizeni.pdf
2. DIVÁKOVÁ, Dana. Projektové řízení. *Projektové řízení* [online]. 3008, č. 1 [cit. 2013-10-06]. Dostupné z: http://www.google.cz/url?sa=t&rct=j&q=&esrc=s&source=web&cd=6&ved=0CFAQFjAF&url=http%3A%2F%2Fwww.konference.dobrarada.cz%2Fweb%2Fdocument%2Fcms_library%2F36.pdf&ei=uGISUtT2L-PX0QXN44DYDQ&usg=AFQjCNEFuA5kODVDdbvWp292Kg7tBYRzfCA&bv=m=bv.53537100,d.Yms
3. Jules_Verne. *Cs.wikipedia.org* [online]. 2013, 3. 10. 2013 [cit. 2013-10-07]. Dostupné z: http://cs.wikipedia.org/wiki/Jules_Verne