

Informacioni sistemi OpenProj

Slavica Aleksić
slavica@uns.ac.rs

Projekat i upravljanje projektima

- **Projekat** je skup međuzavisnih i u logičnom redosledu poređanih aktivnosti usmerenih ka ostvarenju postavljenih ciljeva.
- **Upravljanje projektima** obuhvata sve organizacijske sposobnosti i tehnike, koje su usmerene ka ostvarivanju nekog projekta.

Savremene metode i tehnike upravljanja projektima

Primenom tih tehnika na projektu postiže se:

- eliminisanje ili smanjenje rizika usled neizvesnosti i promena
- povećanje efikasnosti
- usmeravanje pažnje na kritične i važne probleme
- stvaranje osnove za upravljanje i kontrolisanje projekta

Upravljanje projektima

Korišćenje tehnika upravljanja projektima omogućuje menadžerima:

- detaljno određivanje aktivnosti koje treba uraditi
- planiranje potrebnih resursa
- postavljanje vremenskih rokova i kontrolnih tačaka
- prepoznavanje načina na koji će sve to biti urađeno

Komercijalni softver

- Klasični softver:
 - Microsoft Project
 - Milestones
 - MinuteMan
 - Project KickStart
 - Primavera Project Planner
- Web bazirani softver:
 - eProject
 - @task
 - Celoxis
 - eStudio
 - Smooth Projects
 - Copper

Besplatni softver

- Klasični softver:
 - jxProject
 - Gantt project
 - Project Engine
 - Open Workbench
 - OpenProj
- Web bazirani softver:
 - dotProject
 - netOffice
 - phpCollab
 - phpProject
 - iTeamwork
 - Virtual project
 - To Be Done

Osnovna znanja iz upravljanja projektom

Vođa projekta mora posedovati sledeća znanja:

- Stručna iz oblasti iz koje je projekat
- Specijalistička iz upravljanja projektom
- Temeljna iz organizacije, prava i ekonomije
- Sociološko-psihološka

Mrežno planiranje

- Po završetku izrade statičkih planova tj. potreba u radnoj snazi, materijalu i mehanizaciji prelazi se na izradu dinamičkih planova.
- Dinamički planovi sadrže brojčane pokazatelje o trajanju radova i vremenskom usklađivanju izvršenja svih aktivnosti na izradi objekta, kao i pregled korišćenja pojedinih resursa tokom izvođenja radova.
- Dinamički planovi su:
 - » Mrežni Planovi
 - » Gantogrami
 - » Ortogonalni planovi
 - » Ciklogrami

Tehnika mrežnog planiranja

- Metoda mrežnog planiranja sastoji se u grafičkom prikazu tehnološkog procesa (pomoću mrežnih dijagrama) što daje dobru preglednost toka odvijanja radova.

Tehnika mrežnog planiranja

Tehnika mrežnog planiranja obuhvata tri faze:

- Analizu strukture
- Analizu vremena
- Optimizaciju mrežnog plana

Analiza strukture

- Spisak aktivnosti (raščlanjenje celokupnog tehnološkog procesa na manje organizacione celine)
- Određivanje veza između aktivnosti (u skladu sa usvojenom tehnologijom proizvodnje)
- Određivanje trajanja aktivnosti (na bazi urađenih statičkih planova)
- Određivanje potrebnih resursa (radne snage, mehanizacije, materijala i troškova)
- Izrada strukture plana - mreže, koja prikazuje međuzavisnost odvijanja aktivnosti.

Analiza vremena

- određivanje početka i završetka aktivnosti
- određivanje dinamike angažovanja resursa

Optimizacije mrežnog plana

Pored konvencionalnog tipa veze kraj - početak (FS, finish to start) sa odgovarajućim tehnološkim zastojsima gde je to neophodno, trebalo bi primeniti i veze:

- ✓ početak - početak (SS, start to start) i
- ✓ kraj - kraj (FF, finish to finish)

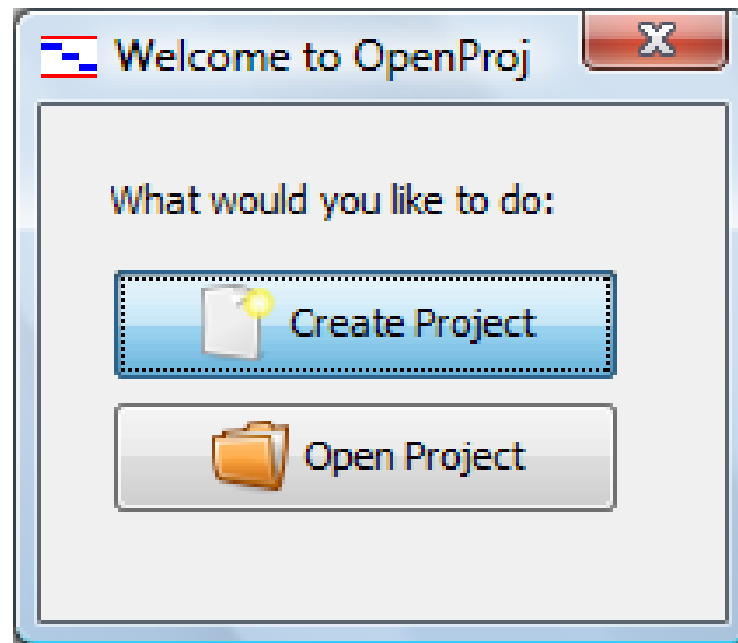
čime se omogućava realno prikazivanje tehnologije i dinamike razvoja.

OpenProj

OpenProj

- Ulazni podaci su:
 - kalendari
 - spisak aktivnosti sa trajanjem
 - veze između aktivnosti
 - resursi
 - troškovi

OpenProj



OpenProj

New Project

Project Name: Studentske vežbe

Manager: Slavica

Start Date: 5/28/12 Forward scheduled

Notes:
Osnovni koncepti projektovanja

OK Cancel Help

Definisanje projekta

The screenshot displays the Microsoft Project interface. On the left, a task list is organized into three phases:

- Ceo projekat**
 - Faza 1
 - Preliminarna analiza (5 days, 6/6/12 8:00 AM)
 - Detaljna analiza (5 days, 6/6/12 8:00 AM)
 - Unajmljivane radnika (7 days, 6/6/12 8:00 AM)
 - Faza 2 (120 days, 6/15/12 8:00 AM)
 - Projektovanje softvera (30 days, 6/15/12 8:00 AM)
 - Nabavka softvera (15 days, 7/27/12 8:00 AM)
 - Obuka (7 days, 8/17/12 8:00 AM)
 - Pisanje programskog kod (90 days, 7/27/12 8:00 AM)
 - Faza 3 (85 days, 11/29/12 5:00 PM)
 - Kritična tačka (0 days, 11/29/12 5:00 PM)
 - Testiranje (60 days, 11/30/12 8:00 AM)
 - Implementacija (25 days, 2/22/13 8:00 AM)

The main window shows a Gantt chart with a task bar for 'Studentske vežbe' (Student exercises) highlighted in red, spanning from May 28, 2012, to June 28, 2012. A resource bar for 'Marko [50%]:Milena' is also visible.

The 'Project Information' dialog box is open, showing the following details:

- Name:** Studentske vežbe
- Manager:** Slavica
- Start:** 5/28/12 8:00 AM
- Finish:** 3/28/13 5:00 PM
- Current Date:** (empty)
- Status Date:** 5/31/12
- Base Calendar:** Standard
- Project Status:** Planning
- Expense Type:** None
- Priority:** 500
- Project Type:** Other
- Division:** (empty)
- Group:** (empty)
- Net Present Value:** 0
- Benefit:** 0
- Risk:** 0.0

The dialog box has 'Close' and 'Help' buttons at the bottom.

Definisanje radnog vremena

Studentske vežbe - C:\FTN_backup\FTN\Informacioni sistem\2012\Studentske vežbe.pod *

OPENPROJ File Edit View Insert Tools Project Help

Change Working Calendar... No Filter No Sorting No Group

Assign Resources... Tracking

Change Working Calendar

For: Standard

Use default
 Non-working time
 Non-default working time

From: 8:00 To: 15:00

May 2012 June 2012

S	M	T	W	T	F	S	S	M	T	W	T	F	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

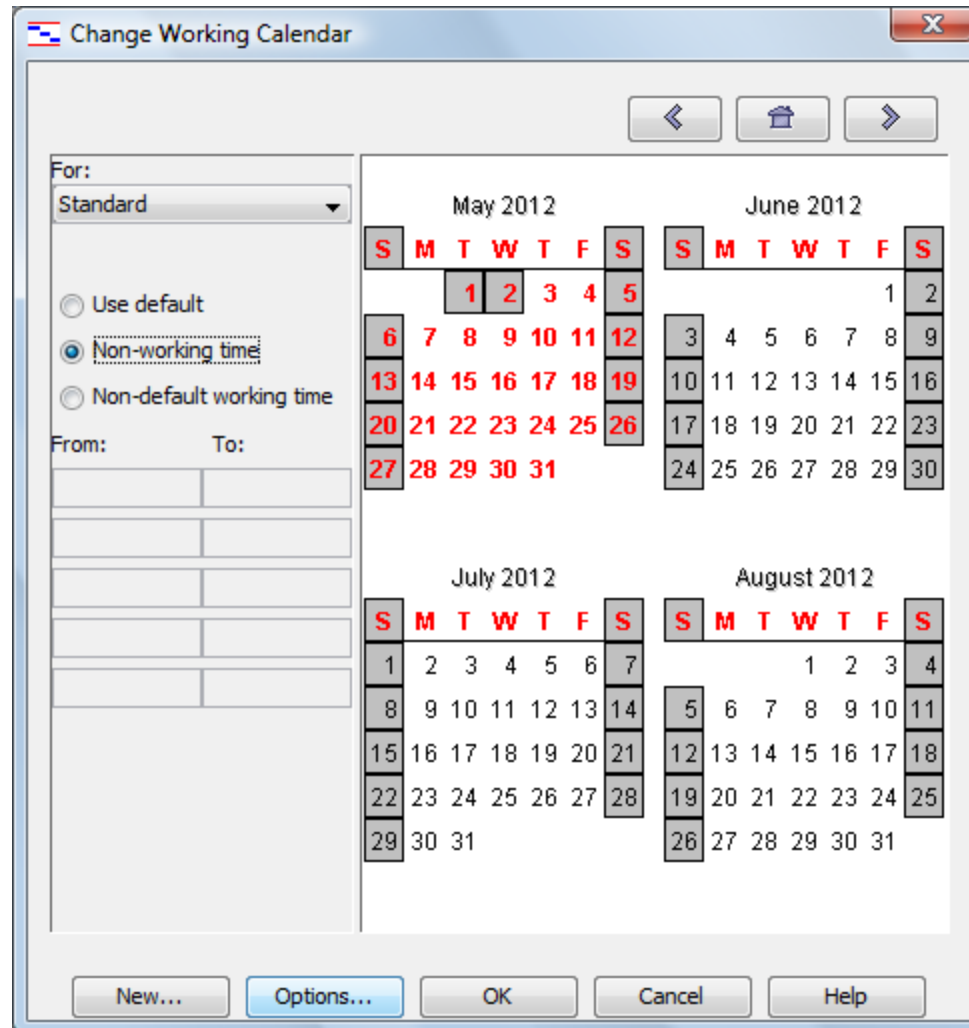
July 2012 August 2012

S	M	T	W	T	F	S	S	M	T	W	T	F	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	

New... Options... OK Cancel Help

Microsoft PowerPoi... Studentske vežbe - ... SR 10:46 AM

Definisiranje neradnih dana



Definisanje aktivnosti u projektu

The screenshot displays the OPENPROJ software interface. The main window is titled "Studentske vežbe *". The menu bar includes "File", "Edit", "View", "Insert", "Tools", "Project", and "Help". The toolbar contains various icons for file operations and project management. The main area is divided into two panes. The left pane shows a list of project activities with columns for "Name", "Duration", "Start", and "Finish". The right pane shows a Gantt chart with a weekly grid for the period from May 27, 2012, to July 1, 2012. The activities are plotted as vertical bars on the Gantt chart, all starting on May 28, 2012, and ending on May 29, 2012.

ID	Name	Duration	Start	Finish
1	Preliminarna analiza	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
2	Detaljna analiza	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
3	Unajmljivane radnika	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
4	Projektovanje softvera	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
5	Obuka	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
6	Pisanje programskog koda	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
7	Testiranje	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
8	Implementacija	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM

Dodavanje nove aktivnosti

The screenshot shows the Microsoft Project interface. The task list on the left contains the following tasks:

ID	Name	Duration	Start	Finish
1	Preliminarna analiza	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
2	Detaljna analiza	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
3	Unajmljivane	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
4	Projektovanje softvera	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
5	Obuka	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
6	Pisanje progra	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
7	Testiranje	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
8	Implementacije	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM

The Gantt chart on the right shows a weekly view from May 27, 2012, to July 1, 2012. A context menu is open over the 'Implementacije' task, with the following options:

- Indent
- Outdent
- New
- Delete
- Copy
- Cut
- Paste
- Expand
- Collapse

Dodavanje nove aktivnosti

The screenshot displays the Microsoft Project interface. The title bar reads "Studentske vežbe *". The menu bar includes "OPENPROJ", "File", "Edit", "View", "Insert", "Tools", "Project", and "Help". The toolbar contains various icons for file operations and project management. Below the toolbar, there are three dropdown menus: "No Filter", "No Sorting", and "No Group".

The main window is divided into two panes. The left pane shows a task list with the following data:

ID	Name	Duration	Start	Finish
1	Preliminarna analiza	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
2	Detaljna analiza	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
3	Unajmljivane radnika	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
4	Projektovanje softvera	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
5	Nabavka softvera	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
6	Obuka	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
7	Pisanje programskog koda	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
8	Testiranje	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
9	Implementacija	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM

The right pane shows a Gantt chart with a grid. The grid columns are labeled with dates: 27 May 12, 3 Jun 12, 10 Jun 12, 17 Jun 12, 24 Jun 12, and 1 Jul 12. Each date column has a sub-label for the day of the week (F, S, M, T, W, T, F, S). Vertical bars represent task durations, with red bars indicating the tasks listed in the left pane. A vertical green line is positioned at the start of the first task on May 28, 2012.

The Windows taskbar at the bottom shows the Start button, taskbar icons for "Vezbe", "Studentske vežbe *", and "Microsoft PowerPoi...", and the system tray with the time "8:16 PM".

Definisanje grupa aktivnosti

The screenshot displays the Microsoft Project interface. The title bar reads "Studentske vezbe *". The menu bar includes "OPENPROJ", "File", "Edit", "View", "Insert", "Tools", "Project", and "Help". The ribbon contains various icons for project management. The task list table is as follows:

ID	Name	Duration	Start	Finish
1	Faza 1	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
2	Preliminarna analiza	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
3	Detaljna analiza	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
4	Unajmljivane radnika	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
5	Faza 2	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
6	Projektovanje softvera	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
7	Nabavka softvera	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
8	Obuka	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
9	Pisanje programskog koda	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
10	Faza 3	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
11	Testiranje	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
12	Implementacija	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM

The Gantt chart on the right shows a single task bar for "Faza 1" starting on Friday, May 28, 2012, at 8:00 AM and ending at 5:00 PM. The chart is currently empty of other tasks. The status bar at the bottom shows the system tray with the time 8:19 PM.

Definisanje grupa aktivnosti

The screenshot displays the OPENPROJ software interface. The main window shows a project activity list on the left and a Gantt chart on the right. The activity list has columns for Name, Duration, Start, and Finish. A yellow circle highlights the 'Group' column header in the activity list, and a yellow arrow points to the 'Faza 2' activity row. The Gantt chart shows a timeline from May 27, 2012, to July 1, 2012, with vertical bars representing activity durations.

ID	Name	Duration	Start	Finish
1	Faza 1	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
2	Preliminarna analiza	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
3	Detaljna analiza	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
4	Unajmljivane radnika	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
5	Faza 2	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
6	Projektovanje softvera	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
7	Nabavka softvera	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
8	Obuka	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
9	Pisanje programskog koda	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
10	Faza 3	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
11	Testiranje	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
12	Implementacija	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM

Definisanje grupa aktivnosti

The screenshot displays the Microsoft Project interface for a project named "Studentske vezbe". The Gantt chart shows a project duration of 12 days, starting on 5/28/12 at 8:00 AM and ending at 5:00 PM. The project is divided into three phases, each with a duration of 1 day:

- Faza 1:** Activities 1-5, starting 5/28/12 8:00 AM and finishing 5/28/12 5:00 PM.
- Faza 2:** Activities 6-9, starting 5/28/12 8:00 AM and finishing 5/28/12 5:00 PM.
- Faza 3:** Activities 10-12, starting 5/28/12 8:00 AM and finishing 5/28/12 5:00 PM.

The Gantt chart area shows a single vertical bar for the entire project duration, indicating that all activities are scheduled to occur within the same 24-hour period on 5/28/12. The task list on the left provides the following details:

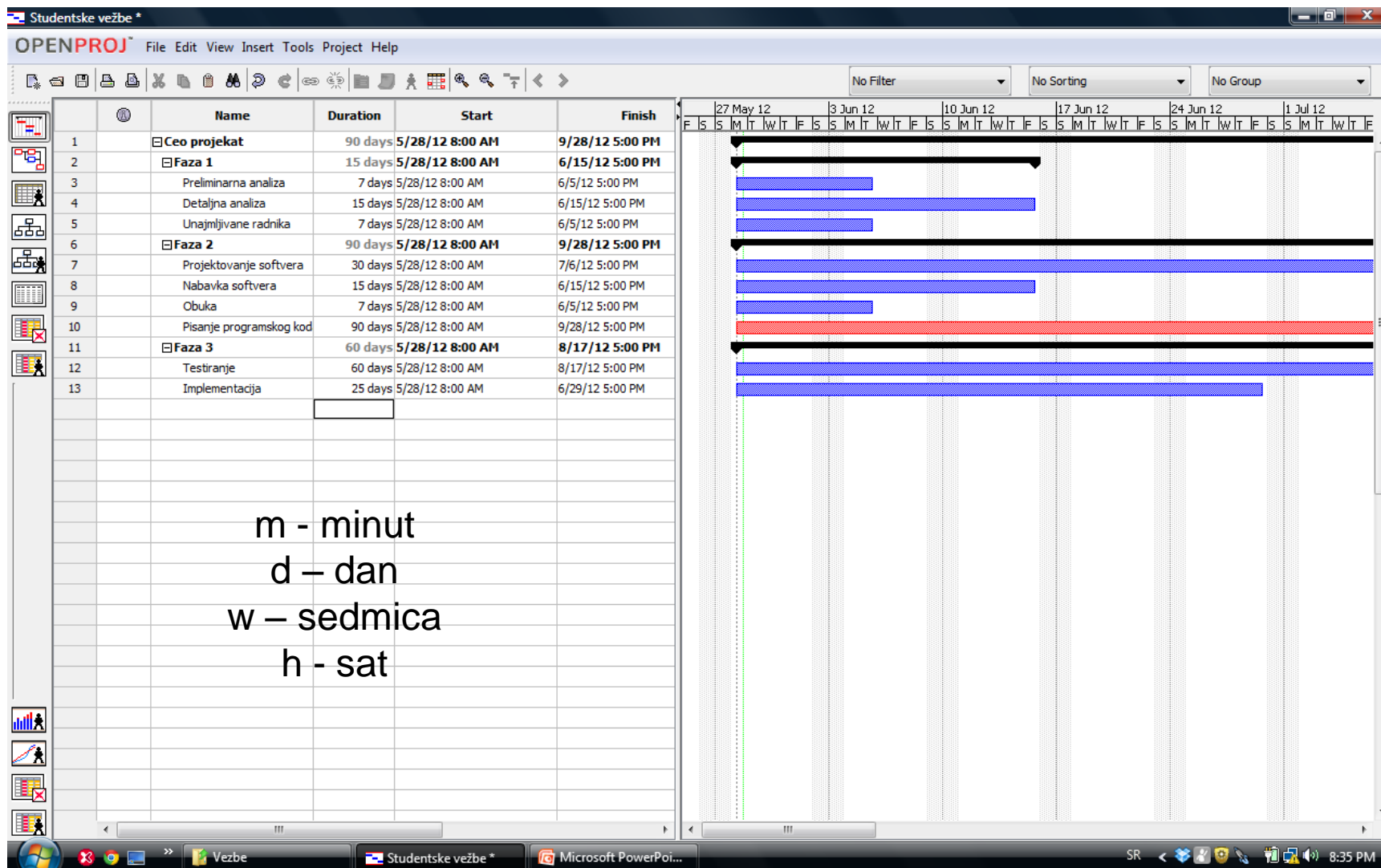
ID	Name	Duration	Start	Finish
1	Faza 1	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
2	Preliminarna analiza	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
3	Detaljna analiza	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
4	Unajmljivane radnika	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
5	Faza 2	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
6	Projektovanje softvera	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
7	Nabavka softvera	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
8	Obuka	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
9	Pisanje programskog koda	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
10	Faza 3	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
11	Testiranje	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
12	Implementacija	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM

Definisanje grupa aktivnosti

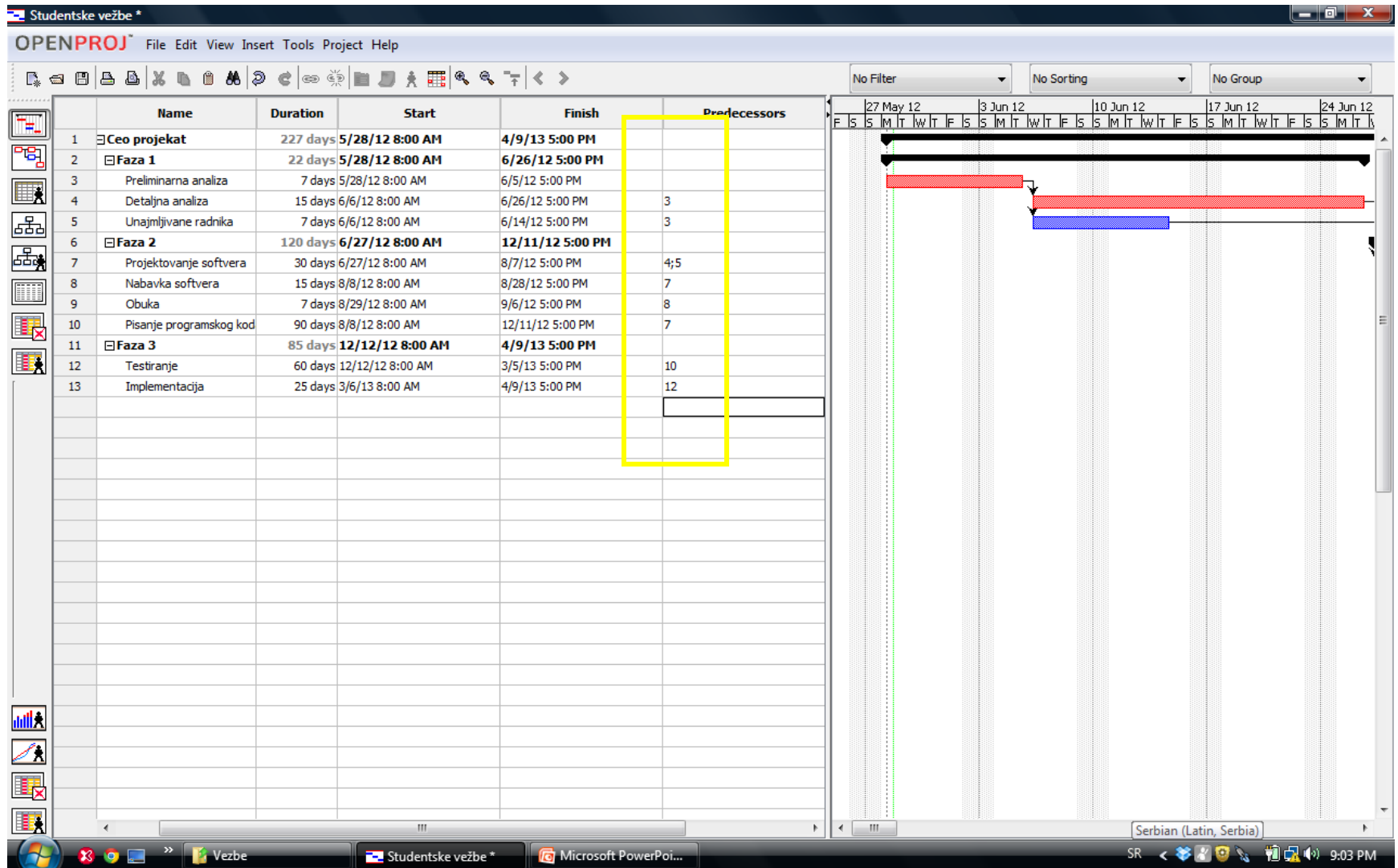
The screenshot displays the Microsoft Project interface for a project named 'Studentske vezbe'. The main window is divided into a task list on the left and a Gantt chart on the right. The task list contains 13 tasks, with three phases (Faza 1, Faza 2, and Faza 3) each containing three sub-tasks. All tasks are scheduled to start on 5/28/12 at 8:00 AM and finish on 5/28/12 at 5:00 PM. The Gantt chart shows a single vertical bar for each task, indicating that all activities are completed by the end of the day on 5/28/12. The interface includes a menu bar (File, Edit, View, Insert, Tools, Project, Help), a toolbar, and a status bar at the bottom showing the system tray with the time 8:25 PM.

ID	Name	Duration	Start	Finish
1	Ceo projekat	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
2	Faza 1	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
3	Preliminarna analiza	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
4	Detaljna analiza	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
5	Unajmljivane radnika	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
6	Faza 2	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
7	Projektovanje softvera	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
8	Nabavka softvera	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
9	Obuka	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
10	Pisanje programskog kod	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
11	Faza 3	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
12	Testiranje	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM
13	Implementacija	1 day?	5/28/12 8:00 AM	5/28/12 5:00 PM

Definisanje trajanja aktivnosti



Međuzavisnosti aktivnosti



Praćenje projekta

Studentske vežbe - C:\FTN_backup\FTN\Sistemi baza podataka\2012\Studentske vežbe.pod *

OPENPROJ File Edit View Insert Tools Project Help

No Filter No Sorting No Group

	Name	Duration	Start	Finish	Predecessors
1	Ceo projekat	227 days	6/6/12 8:00 AM	4/18/13 5:00 PM	
2	Faza 1	22 days	6/6/12 8:00 AM	7/5/12 5:00 PM	
3	Preliminarna analiza	7 days	6/6/12 8:00 AM	6/14/12 5:00 PM	
4	Detaljna analiza	15 days	6/15/12 8:00 AM	7/5/12 5:00 PM	
5	Unajmljivane radnika	7 days	6/6/12 8:00 AM	6/13/12 5:00 PM	
6	Faza 2	120 days	7/6/12 8:00 AM	12/21/12 5:00 PM	
7	Projektovanje softvera	30 days	7/6/12 8:00 AM	8/1/12 5:00 PM	
8	Nabavka softvera	15 days	8/17/12 8:00 AM	9/6/12 5:00 PM	
9	Obuka	7 days	9/7/12 8:00 AM	9/14/12 5:00 PM	
10	Pisanje programskog kod	90 days	8/17/12 8:00 AM	12/1/12 5:00 PM	
11	Faza 3	85 days	12/21/12 8:00 AM	4/1/13 5:00 PM	
12	Testiranje	60 days	12/21/12 8:00 AM	3/1/13 5:00 PM	
13	Implementacija	25 days	3/15/13 8:00 AM	4/1/13 5:00 PM	

Task information

Task Information - 3

General Predecessors Successors Resources Advanced Notes

Name: Preliminarna analiza

Duration: 7 days Estimated

Percent Complete: 55% Priority: 500

Cost: \$0.00 Work: 56 hours

Dates

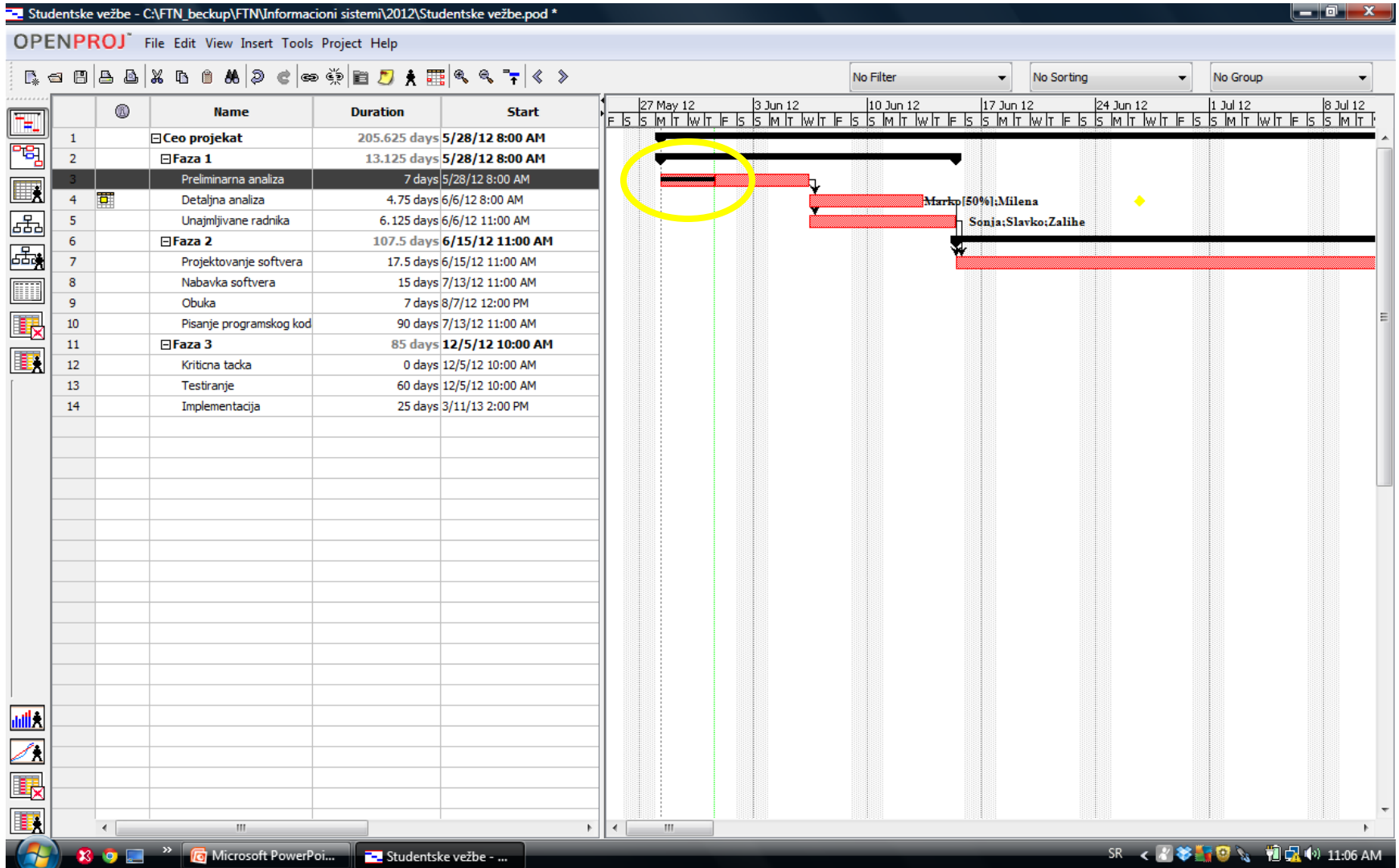
Start: 5/28/12 8:00 AM Finish: 6/6/12 11:00 AM

Baseline Start: Baseline Finish:

Close Help

Task Information dialog box showing details for 'Preliminarna analiza' task, including duration (7 days), percent complete (55%), priority (500), cost (\$0.00), work (56 hours), and dates (Start: 5/28/12 8:00 AM, Finish: 6/6/12 11:00 AM).

Praćenje projekta



Upravljanje resursima

- Prvo se formira baza resursa, koji se tek nakon definisanja određenih parametara dodaju aktivnostima
- U toku realizacije projekta, project manager vrši razna podešavanja resursa, količine radnog vremena i trajanja aktivnosti

Upravljanje resursima

Najčešći i najtipičniji poslovi u upravljanju realizacijom projekta su:

- prebacivanje resursa sa jednih (ne kritičnih) na druge (kritične) aktivnosti
- dodavanje resursa da bi se aktivnost brže ili na vreme završila
- menjanje količine rada potrebnog da se aktivnost uspešno završi
- podešavanje datuma početaka i/ili završetaka aktivnosti

Upravljanje resursima

- Promenom jedne od nabrojanih promenljivih, menjaju se ostale, a OpenProj te promene, odnosno njihove posledice, automatski proračunava.
- Taj proračun predstavlja jedan od najvažnih proračunskih procesa tokom upravljanja projektima korišćenjem softverskih paketa

Upravljanje resursima

Međuzavisnost između duration (trajanja), work (količine rada) i jedinica resursa (units) se može iskazati sledećom formulom:

$$\text{Duration} = \text{Work/Units}$$

Upravljanje resursima

Studentske vežbe - C:\FTN_backup\FTN\Sistemi baza podataka\2012\Studentske vežbe.pod *

OPENPROJ File Edit View Insert Tools Project Help

No Filter No Sorting No Group

	Name	Duration	Start	Finish	Predecessors
1	Ceo projekat	227 days	6/6/12 8:00 AM	4/18/13 5:00 PM	
2	Faza 1	22 days	6/6/12 8:00 AM	7/5/12 5:00 PM	
3	Preliminarna analiza	7 days	6/6/12 8:00 AM	6/14/12 5:00 PM	
4	Detaljna analiza	15 days	6/15/12 8:00 AM	7/5/12 5:00 PM	3
5	Unajmljivane radnika	7 days	6/6/12 8:00 AM	6/14/12 5:00 PM	3
6	Faza 2	120 days	7/6/12 8:00 AM	12/20/12 5:00 PM	
7	Projektovanje softvera	30 days	7/6/12 8:00 AM	8/16/12 5:00 PM	4;5
8	Nabavka softvera	15 days	8/17/12 8:00 AM	9/6/12 5:00 PM	7
9	Obuka	7 days	9/7/12 8:00 AM	9/17/12 5:00 PM	8
10	Pisanje programskog kod	90 days	8/17/12 8:00 AM	12/20/12 5:00 PM	7
11	Faza 3	85 days	12/21/12 8:00 AM	4/18/13 5:00 PM	
12	Testiranje	60 days	12/21/12 8:00 AM	3/14/13 5:00 PM	10
13	Implementacija	25 days	3/15/13 8:00 AM	4/18/13 5:00 PM	12

27 May 12 3 Jun 12 10 Jun 12 17 Jun 12 24 Jun 12

The Gantt chart displays the project schedule from May 27, 2012, to June 24, 2012. Tasks are represented by horizontal bars. Task 1 (Ceo projekat) is a long black bar spanning the entire duration. Task 2 (Faza 1) is a black bar from 6/6/12 to 7/5/12. Task 3 (Preliminarna analiza) is a red bar from 6/6/12 to 6/14/12. Task 4 (Detaljna analiza) is a red bar from 6/15/12 to 7/5/12. Task 5 (Unajmljivane radnika) is a blue bar from 6/6/12 to 6/14/12. Task 6 (Faza 2) is a long black bar from 7/6/12 to 12/20/12. Task 7 (Projektovanje softvera) is a black bar from 7/6/12 to 8/16/12. Task 8 (Nabavka softvera) is a black bar from 8/17/12 to 9/6/12. Task 9 (Obuka) is a black bar from 9/7/12 to 9/17/12. Task 10 (Pisanje programskog kod) is a black bar from 8/17/12 to 12/20/12. Task 11 (Faza 3) is a long black bar from 12/21/12 to 4/18/13. Task 12 (Testiranje) is a black bar from 12/21/12 to 3/14/13. Task 13 (Implementacija) is a black bar from 3/15/13 to 4/18/13. Arrows indicate dependencies between tasks.

Windows taskbar: Vežbe, Studentske vežbe - ..., Microsoft PowerPoi... 9:11 PM

Upravljanje resursima

Resursi se dele na:

- rad (čoveka ili mašine) i
- materijale.

Upravljanje resursima

Studentske vezbe - C:\FTN_backup\FTN\Informacioni sistem\2012\Studentske vezbe.pod *

OPENPROJ File Edit View Insert Tools Project Help

No Filter No Sorting No Group

	Name	RBS	Type	E-mail Address	Material Label	Initials	Group	Max. Units	Standard Rate	Overtime Rate	Cost Per Use	Accrue At	Base Cale
1	Marko		Work	marko@uns.ac.rs		M		100%	\$0.00/hour	\$0.00/hour	\$10.00	Prorated	Standard
2	Milena		Work			M		100%	\$0.00/hour	\$0.00/hour	\$0.00	Prorated	Standard
3	Janko		Work			J		100%	\$0.00/hour	\$0.00/hour	\$0.00	Prorated	Standard
4	Sonja		Work			S		100%	\$0.00/hour	\$0.00/hour	\$0.00	Prorated	Standard
5	Slavko		Work			S		100%	\$0.00/hour	\$0.00/hour	\$0.00	Prorated	Standard
6	Zalihe		Material			Z			\$0.00		\$0.00	Prorated	

SR 9:29 PM

Upravljanje resursima

Studentske vežbe - C:\FTN_backup\FTN\Sistemi baza podataka\2012\Studentske vežbe.pod *

OPENPROJ File Edit View Insert Tools Project Help

No Filter No Sorting No Group

ID	Name	RBS	Type	E-mail Address	Material Label	Initials	Group	Max. Units	Standard Rate	Overtime Rate	Cost Per Use	Accrue At	Base Ca
1	Marko		Work	marko@uns.ac.rs		M		50%	\$0.00/hour	\$0.00/hour	\$10.00	Prorated	Standard
2	Milena		Work			M		100%	\$0.00/hour	\$0.00/hour	\$0.00	Prorated	Standard
3	Janko		Work			J		100%	\$0.00/hour	\$0.00/hour	\$0.00	Prorated	Standard
4	Sonja		Work								\$0.00	Prorated	Standard
5	Slavko		Work								\$0.00	Prorated	Standard
6	Zalihe		Material								\$0.00	Prorated	Standard

Resource Information

General Costs Resource Availability Tasks Notes

Name: Marko Initials: M

E-mail Address: marko@uns.ac.rs Group:

RBS: Generic

Type: Work Material Label:

Base Calendar: Standard

Close Help

Studentske vežbe - ... Microsoft PowerPoi... EN 10:30 AM

Upravljanje resursima

Studentske vežbe - C:\FTN_backup\FTN\Informacioni sistem\2012\Studentske vežbe.pod *

OPENPROJ File Edit View Insert Tools Project Help

No Filter No Sorting No Group

	Name	RBS	Type	E-mail Address	Material Label	Initials	Group	Max. L
1	Marko		Work	marko@uns.ac.rs		M		
2	Milena		Work			M		
3	Janko		Work			J		
4	Sonja							
5	Slavko							
6	Zalihe							

Resource Information

Change Working Calendar

For: Marko

Based on Standard

Use default

Non-working time

Non-default working time

From: 8:00 To: 12:00

Options... OK Cancel Help

Microsoft PowerPoi... Studentske vežbe - ... 11:25 AM

Constraint type, Deadline

Task Information - 4

General Predecessors Successors Resources **Advanced** Notes

Name: Detaljna analiza

WBS: Display task as milestone

Constraints

Constraint Type: Start No Later Than Constraint Date: 6/6/12 8:00 AM

Deadline: 6/26/12

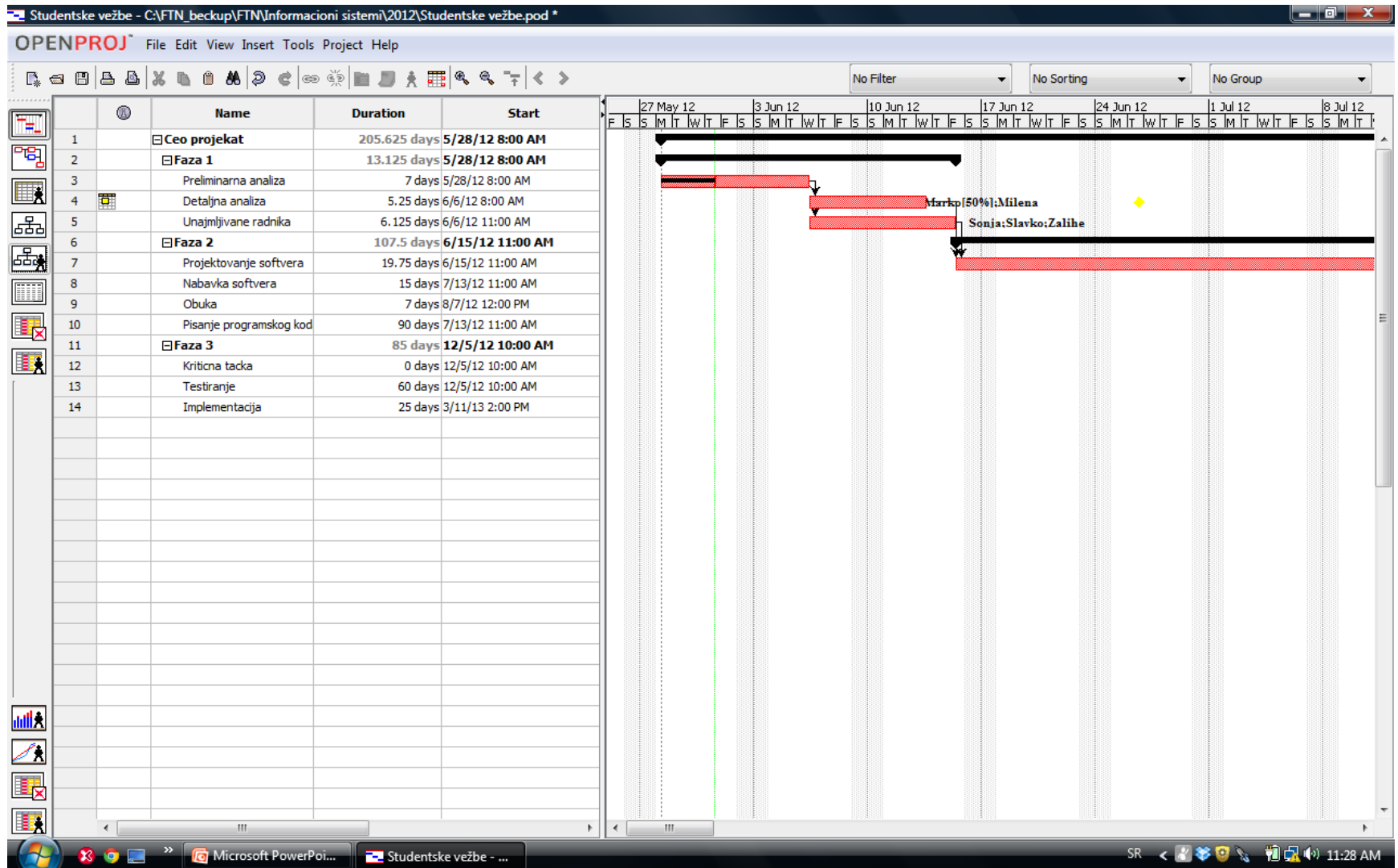
Type: Fixed Units Effort Driven

Task Calendar: Ignore Resource Calendar

Earned Value Method: % Complete

Close Help

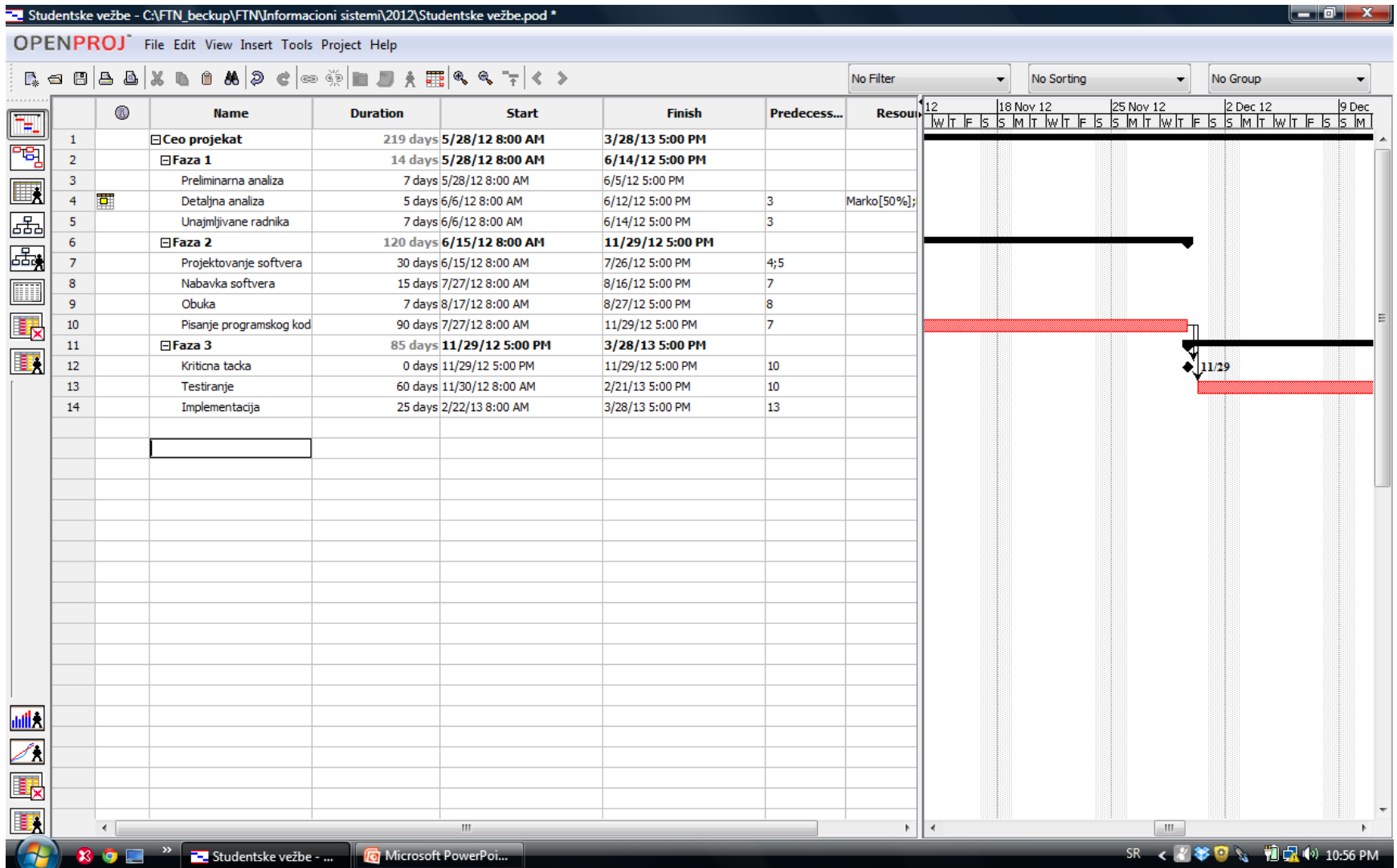
Constraint type, Deadline



Metoda ključnih događaja

- Ključni događaji predstavljaju najvažnije aktivnosti na projektu ili na pojedinim fazama projekta i njihova trajanja su najčešće fiktivna.
- Plan ključnih događaja, po pravilu koristi vrhunski menadžment firme i njime se upravlja projektom na strateškom nivou.
- Važi pravilo da ukoliko se u toku realizacije projekta ključni događaji odigravaju u planiranim granicama, može se očekivati da će se ceo projekat realizovati u planiranom i ugovorenom roku.

Milestone



Milestone

Task Information - 12

General Predecessors Successors Resources **Advanced** Notes

Name:

WBS: Display task as milestone

Constraints

Constraint Type: Constraint Date:

Deadline:

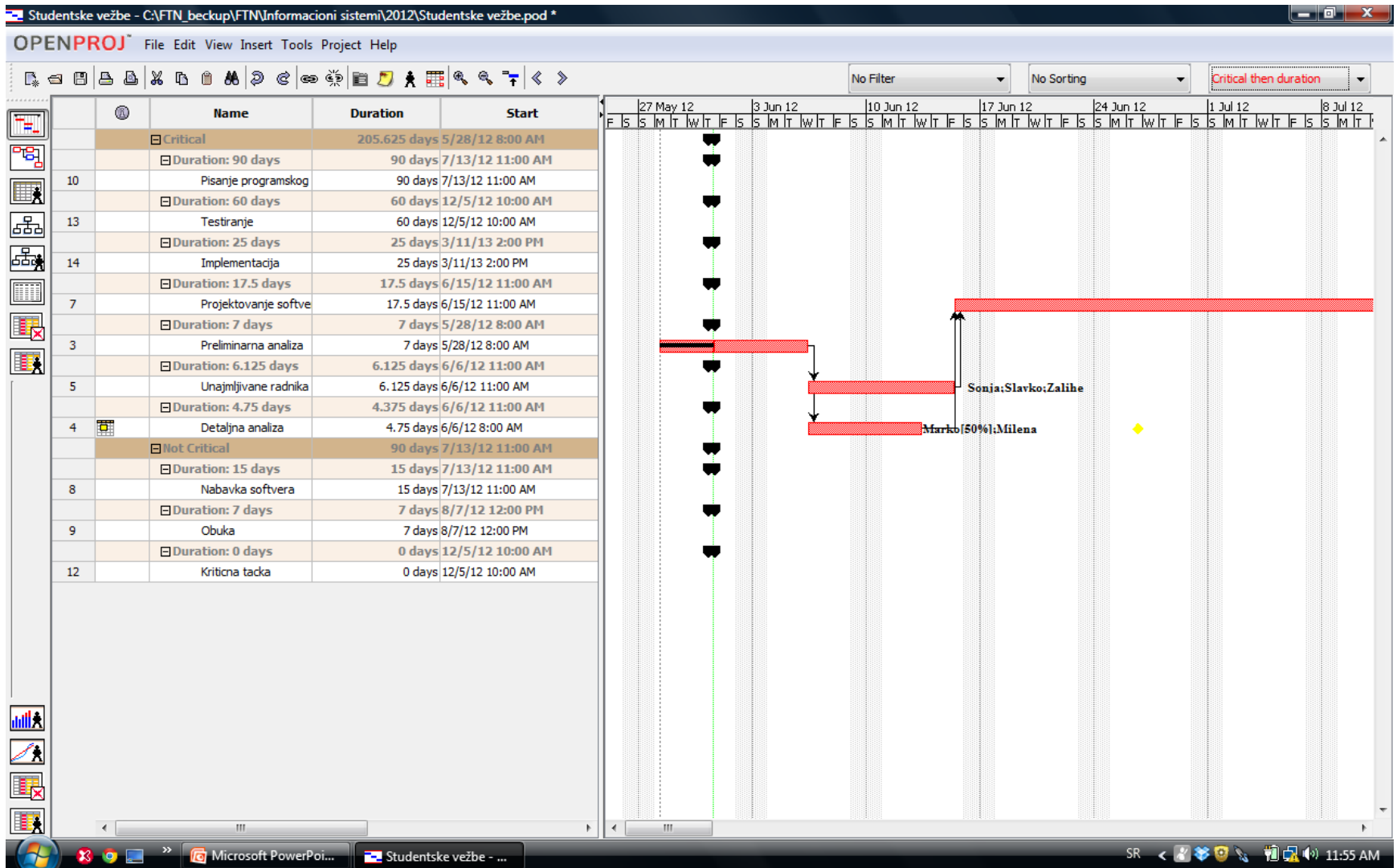
Type: Effort Driven

Task Calendar: Ignore Resource Calendar

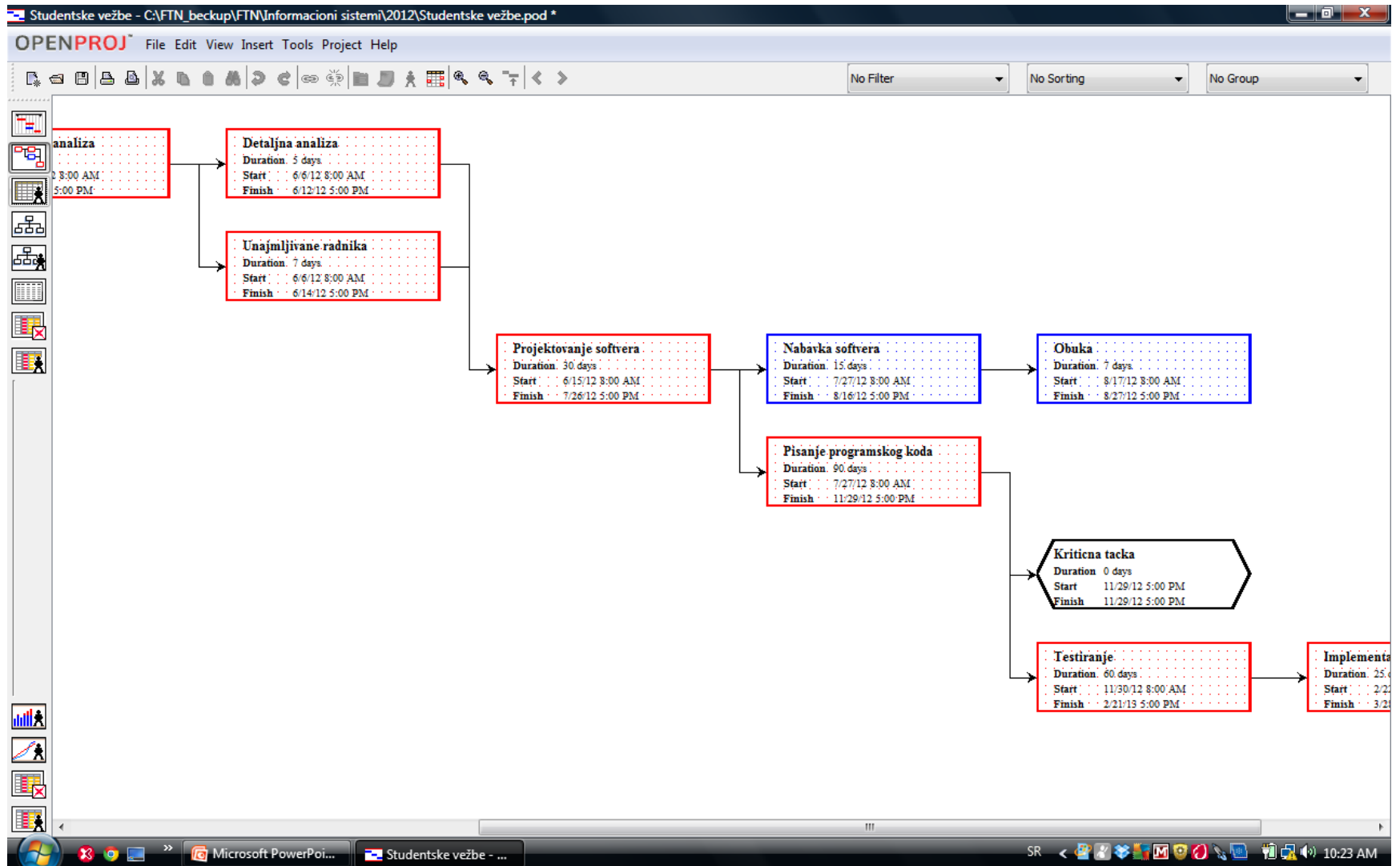
Earned Value Method:

Close Help

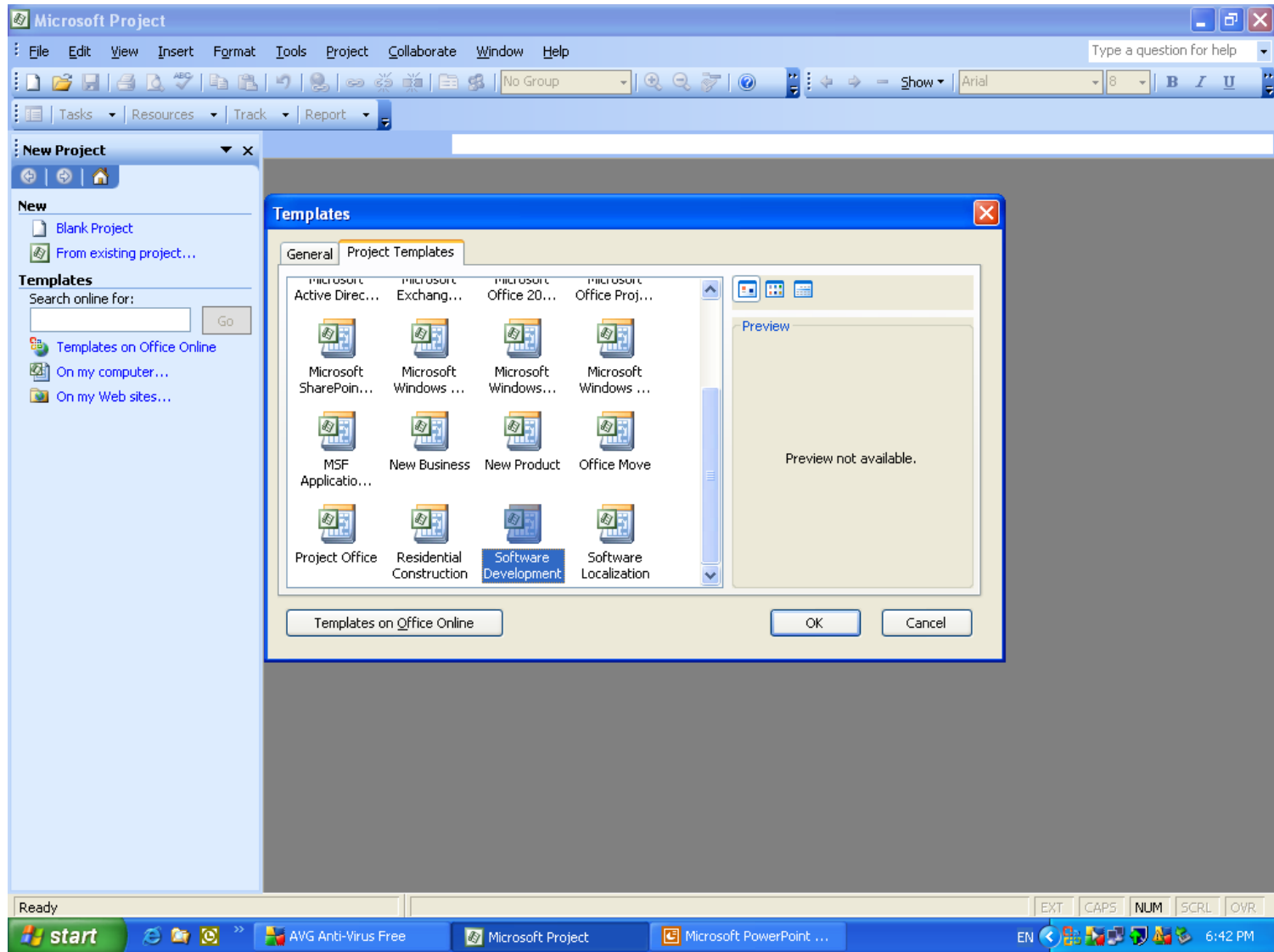
Opterećenje resursa



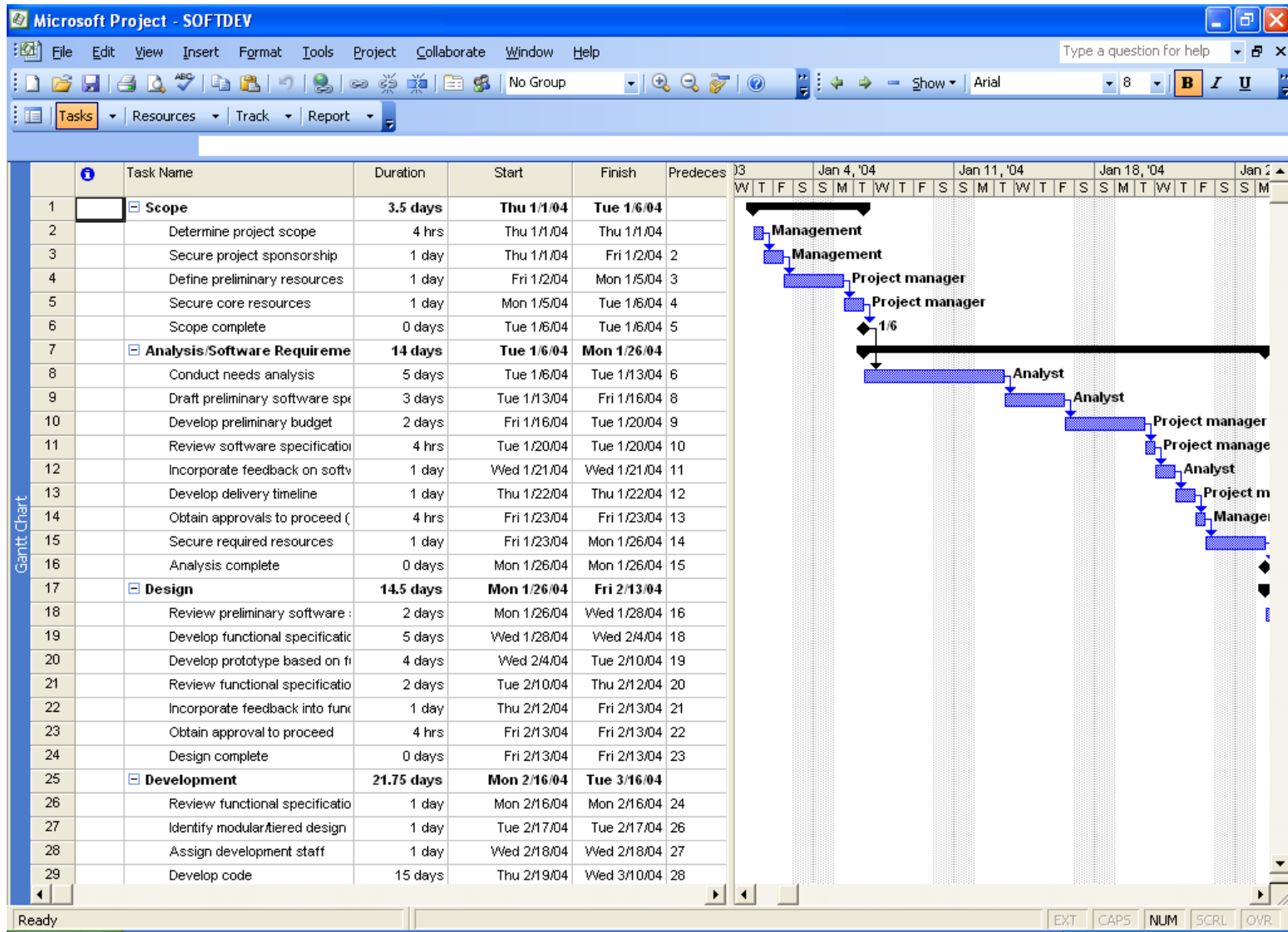
Mrežni dijagram



Templates u MS Project



Templates



Informacioni sistemi

Slavica Aleksić
slavica@uns.ac.rs