CPS 714 Project

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Please see attached PDFs for additional charts and diagrams missing from this report.

Exhibit 1: Task descriptions, including individual task duration and task dependencies, although not all details have been spelled out in full. Task duration is given in days. Italicized tasks are summary (roll-up, higher-level) tasks.

Task Name	Duration	Dependencies
Concept	18d	
Evaluate current systems	5d	
Define Requirements	5d	Evaluate current systems complete
Define user requirements	5d	
Define content requirements	3d	
Define system requirements	3d	
Define server owner requirements	2d	
Define specific functionality	1d	User reqs. complete
Define risks and risk management approach	4d	Specific functionality complete
Develop project plan	2d	Risk plan complete
Brief web development team	1d	Project plan complete
Web Site Design	22d	
Design User Interface	12d	
Determine the layout of the site	8d	Concept complete
Determine the data links	4d	Layout complete
Decide how to implement functionality	3d	Layout complete
User Interface designed	0d	Datalinks complete
Design Server Setup	6d	UI design complete
Determine estimated disk space utilization	0.5d	
Determine estimated traffic	0.5d	
Design access permission	1d	
Design testing/staging area scheme	3d	Server setup tasks complete
Communicate with server operations	2d	Staging area scheme complete

Server site live	0d	Server operations complete
Develop Server Support Infrastructure	6d	
Determine network impact	2d	Staging area scheme complete
Determine what changes need to be made	3d	Network impact complete
Communicate with support staff	1d	Change determination complete
Support requirements met	0d	Communication with support staff complete

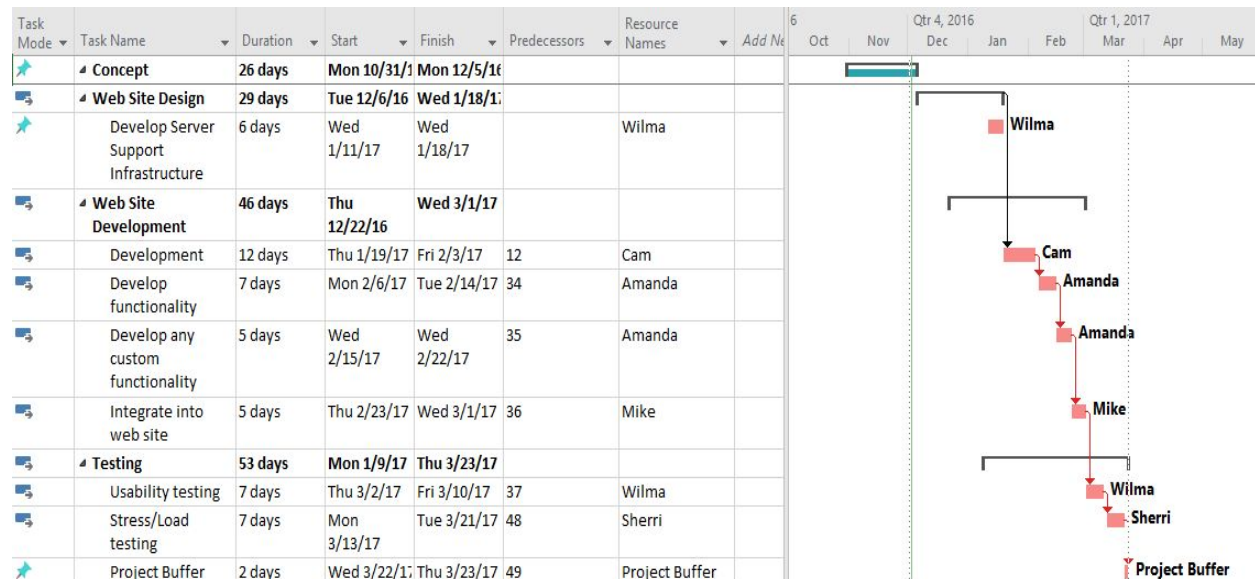|		
Web Site Development	55d	
Develop pages and links	21d	
Create HTML style templates	4d	User Interface Design complete
Determine development tool	1d	Templates complete
Development	12d	Website design complete
Develop functionality	7d	Development complete
Develop any custom functionality	5d	Functionality Complete
Integrate into web site	5d	Custom Functionality Complete
Content Migration/Integration	27d	
Determine what content will be moved/converted	3d	Content requirements complete
Prioritize content conversion	2d	Content determination complete
Set content conversion standards	2d	Content prioritization complete
Implement content migration and conversion	15d	Standards complete
Test conversion formats	5d	Migration and conversion complete
Testing	20d	
Create test plan	4d	Design testing complete
Page Testing	10d	Develop pages complete
Link Testing	6d	Develop links complete
Usability testing	7d	Website complete
Stress/Load testing	7d	Usability test complete
Roll Out	25d	
Move site to production server	2d	Development, integration, conversion, test plan, page & link testing complete
Determine roll out schedule	5d	20 days before all web development complete

Communicate roll out plan to users	10d	Roll out schedule complete
Conduct user training	10d	Roll out schedule complete
Release internal PR	10d	Roll out schedule complete
Rollout	0d	Begin 10 days after rollout plan, training, and PR
Support	28d	
Determine what support resources are needed	4d	Support requirements complete
Make appropriate staffing changes	5d	Support resource needs complete
Determine method that users will attain support	3d	Staffing changes complete
Determine support process	5d	Support method complete
Support goes live	0d	Same time as rollout

Exhibit 2: resources.

Resource Name	Role	Std Rate	Ovt. Rate
Amanda	UI Designer	25.76	38.64
Brenda	Database Designer	43.24	64.86
Cam	HTML Developer	23.00	34.50
Harriet	Marketing Editor	43.24	64.86
Mike	Technical lead	80.00	120.00
Sherri	Project Manager	80.00	120.00
Tony	Information Architect	43.78	65.67
Wilma	QA Lead	80.00	120.00

Task 6: Critical Path

Shortest Project Duration: 100 days

Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
📌	▲ Concept	26 days	Mon 10/31/1	Mon 12/5/16		
🔗	▲ Web Site Design	29 days	Tue 12/6/16	Wed 1/18/1		
📌	Develop Server Support Infrastructure	6 days	Wed 1/11/17	Wed 1/18/17		Wilma
🔗	▲ Web Site Development	46 days	Thu 12/22/16	Wed 3/1/17		
🔗	Development	12 days	Thu 1/19/17	Fri 2/3/17	12	Cam
🔗	Develop functionality	7 days	Mon 2/6/17	Tue 2/14/17	34	Amanda
🔗	Develop any custom functionality	5 days	Wed 2/15/17	Wed 2/22/17	35	Amanda
🔗	Integrate into web site	5 days	Thu 2/23/17	Wed 3/1/17	36	Mike
🔗	▲ Testing	53 days	Mon 1/9/17	Thu 3/23/17		
🔗	Usability testing	7 days	Thu 3/2/17	Fri 3/10/17	37	Wilma
🔗	Stress/Load testing	7 days	Mon 3/13/17	Tue 3/21/17	48	Sherri
📌	Project Buffer	2 days	Wed 3/22/17	Thu 3/23/17	49	Project Buffer

Task 7: Prepare a list of five most important risks and rank them to the best of your knowledge. Attach the justification of the rank, including estimates for any relevant parameters you have used.

Risks can be associated with each and every resource associated within the project but the ones that will have a high impact to the project are the ones we must prevent. The rankings below are based on the probability of the risk occurring and the impact it would have on the project.

1. **Lack of Resources per Department**
   We can see that we have one resource for each department and this in itself is a risk. If one of our resources is slacking and/or can't complete the project then we have to backup resource to provide help. This can impact the project progress and we must have actions to mitigate this risk if it does occur. One of the ways this can be done is by acquiring more resources but at the same time we know there is a cost associated with that. We also have the option to outsource and pay a cheaper price for temporary work needed.

2. **Loss of Staff members**

In the case of staff member(s) quitting their job, we must be able to mitigate the risk even before any loss. This risk falls under both Mike and Sherri as they are both leads and manage the project progress. One action would be to identify 'shadows' for the staff members and provide training. Another action is to find recruitment agencies and request position fillers in the event of a loss.

3. **Lack of Funding**

Funding in a company is extremely important to the fact that a loss of it will mean a high impact on the project progress. Costs associated do not only fall under paying for the staff but as well as any financial support for behind the scenes work. This includes everything in the Web Design, Testing, and Rollout phases. A lack of funding will greatly impact these areas and could therefore prevent the project from completion. Ways to mitigate this is allocate ahead of time the amount of funding needed for the project and adding a buffer amount in the case more funding is needed.

4. **Lack of Managerial Support**

We can see in the Holiday section of the project that Sherri goes on Vacation from Nov 20-24. Since she is the project manager, it is key for Mike (technical lead) to be able to take care of the project progress while she is gone. If he fails to do so then this can impact the project timeline and would fall into impacting the feeding buffer. It is Sherri's job to give authority to Mike and make sure the team follows his orders while she is gone.

5. **Bottleneck in Development (Also in Critical Chain)**

There is a possibility of errors and bugs occurring in development, causing the other developers and testers to be delayed. If Cam takes longer than his 12 days to do the original website development, then Amanda and Mike will be delayed on waiting for him. Therefore, this can be mitigated by having high quality and timely code, as well as unpaid overtime for any mistakes or unreached timelines.