









Sourcing of Online Teaching Materials for Teachers Project in Pakistan

Jan 30, 2018

Versions Control

Version #	Revision Date	Prepared By	Approval By	Approval Date	Reason
1.0	Jan 30, 2018	Rafat Tahboosh; Project Manager Diana Jabir; Quality Manger Stephanie (Jing) Wu; Development Manager Taru Agarwal; Operations Manager Alizeh Zaman; Communication Manager Jithin John Mathews; Research Manager	Prof. Peter Carr		Initial release of Team 5 GS7 PMP

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1. Introduction

This document describes the **Project Management Plan (PMP)** for Team 5 in MSCI 651 International Project Management grad course for Management Sciences program at University of Waterloo. Team 5 has been assigned to source online teaching materials for general science grade 7 curriculum for teachers in Pakistan under the initiative of TWF (Teachers without Frontiers).

The purpose of this document is to define how the project is to be executed, monitored and controlled by the project team members. It details how the team will manage the project based on some PMI-based knowledge areas, which include integration, scope management (Scope statement, milestones, deliverables, assumptions and constraints), schedule, quality, risk, human resource and communications management.

These knowledge areas are further tailored to reflect the specifics of the project in the sections of the PMP and the related Appendices: The scope management plan in Section 2 clearly determines the scope statement, in scope and out scope activities, project milestones, key deliverables, in addition to the project assumptions and constraints. The project schedule which shows the assigned tasks and activities with their timelines and dependencies was prepared using Gantt Chart as shown in section 3. In order to successfully complete the project deliverables and achieve its objectives, the team has developed and agreed upon the team structure and governance, rules, members roles & responsibilities, monitoring of their progress and performance, in addition to their teamwork values and ethics as shown in the human resources management plan (Sec. 9). The team has also agreed to communicate, collaborate and share information within the team and with project stakeholders according to the communication plan in section 4 using channels and tools such as; regular meetings, emails, WhatsApp group, asana (Collaboration and project tracking tool). The project deliverables will be verified for their quality characteristics against the client requirements and GS 7 curriculum as per the standards and details described in the quality management plan in section 6. Furthermore, any changes in the project scope or other aspects, issues, risks will be managed according to change, issues and risk management plans as described in section 5 and section 7 respectively. The team has finally determined their compass towards the project success by adhering to the success factors and teamwork values as summarized in section 9.

The PMP was prepared by all team members based on extensive analysis of the project description and requirements, that are available on Learn portal from project stakeholders (The sponsor; Prof. Peter Carr and Client representative; Mr. Omer Faheem); in addition to the provided information in lectures. Then, the PMP will be submitted to the project sponsor and client for review and acceptance (Section 10). All the related appendices are listed in Section 10 and are considered an integral part of this document.

2. Project Objectives and Scope Management

2.1 Project Scope Statement

The purpose of the Project Scope Statement is to provide a baseline understanding of the scope of a project to include the project's scope and deliverables, the work required to complete the deliverables, and ensure a common understanding of the project's scope among all stakeholders.

2.1.1 Project Objectives

TWF project team 5 aims at providing the teacher of Science Grade 7 in Pakistani schools with high-quality, reliable, digital learning resources to cover the national student learning outcomes (SLOs) corresponding to this subject and grade in order to fulfill the following objectives:

- 1. Support the TWF organization in introducing the blended learning technologies in Pakistani schools.
- 2. Enable a more interactive, dynamic learning environment in the schools by introducing learning games, videos, presentations, and other resources.
- 3. Supplement the teaching process in the schools by allowing the already available learning resources online that at least matches %75 of the SLO's to reach the teachers and students in Pakistan.
- 4. Help the teachers in schools to efficiently create their lesson plans by including quality resources mapped to their learning objectives to enhance the learning process.
- 5. Create a reliable resource repository baseline that can be continuously enriched and built upon.

2.1.2 Scope Description

This section describes the project boundaries in terms of what is in scope and what is out of scope to avoid scope unfulfillment or scope creep.

In Scope

- Providing URL's to external learning resources that can be accessible via Internet.
- Providing learning resources that at least match the students learning outcomes (SLOs) as per Pakistan National Curriculum General
 Science Grades 4- 8 document provided by TWF.
- Providing around 4 learning resources for each of the 106 SLOs for Science Grade 7 in the Curriculum.
- Providing learning resources of several types; videos, interactive games, assessments, etc.
- Providing high-quality and reliable learning resources that are appropriate to be used in Pakistani schools.

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2. Project Objectives and Scope Management

- Providing a learning resource- SLO mapping sheet in excel format with accessible links that can uploaded on TWF portal or any other external website.
- Providing learning resources that can be accessible by any or all platforms and operating systems.
- Providing all required documentation such as project management plan, weekly status reports and final report.

Out of Scope

- Proving learning resources for other subjects or grades than Grade 7 Science.
- Developing or creating any learning resources.
- Proving learning resources in any format other than links to external websites.
- Developing or creating an application to display, fetch or search for learning resources.

Project Assumptions

- All up-to-date student learning outcomes (SLOs) are provided for Science Grade 7.
- The deliverables provided will be validated by the subject specialists from the customer side.
- Support and attention will be provided by customer whenever required to answer questions and solving any possible arising issues raised by team 5.
- SLO's mapping to learning resources can be left blank in case there are no matching high-quality resources available on the internet.

Project Constraints

- All learning resources should be accessible for public and free of charge.
- The project duration is 3 months.
- There are only 6 students available to work on Science Grade 7 on a non-full basis.

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2. Project Objectives and Scope Management

2.2 Project Milestones and Deliverables

This section clearly defines and illustrates the project milestones, main steps for each milestone in addition to the key deliverables for each milestone and their due dates based on the captured requirements, scope statement and the client national curriculum for GS 7.

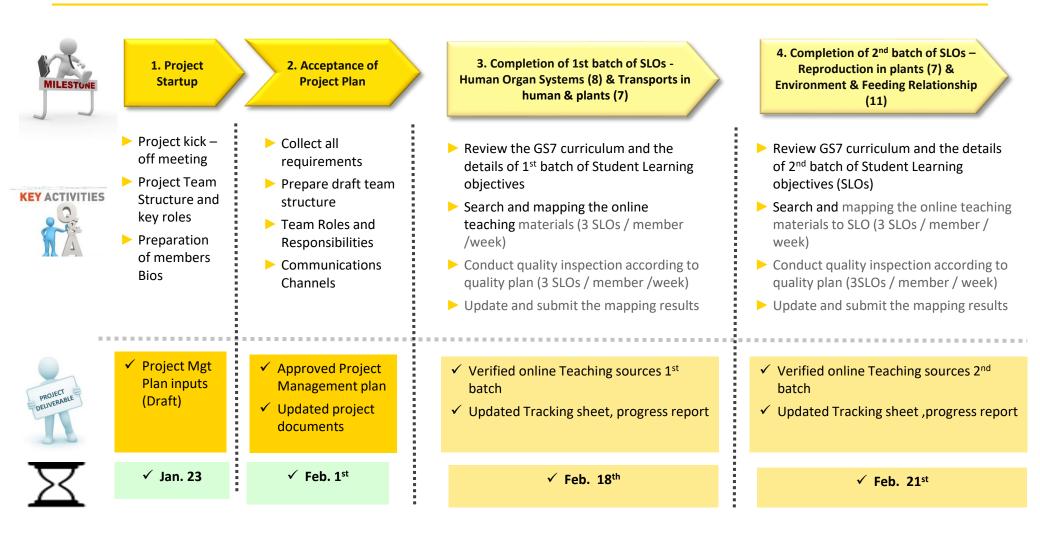
The milestone will not be considered completed unless all the stages and steps have been completed and the main deliverables were achieved including any quality control activities and all the related project reports and documents updated such as Clients SLOs tracking sheet, asana PM & Monitoring tool and the project document and client drobox folders. For the online sourcing of the teaching material milestones and mapping to the SLOs, It will be performed in 6 batches; 2 units for each batch (total 12 units with 106 SLOs for GS&), each unit will be assigned to every member.

The key activities for each stage are described in more details with clear timelines and responsibilities for team members in the project Gantt Chart (Appendix A, Section 3.0).

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2. Project Objectives and Scope Management (continued)

2.2 Project Milestones and Deliverables



2. Project Objectives and Scope Management (continued)

2.2 Project Milestones and Deliverables



5. Completion of 3rd batch of SLOs – Water (6) & Structure of an Atom (10)

6. Completion of 4th batch of SLOs – Physical & Chemical and processes (9) & Transmission of Heat (8

7. Completion of 5th batch of SLOs – Dispersion of Light (10) & Sound Waves (10)





- Review GS7 curriculum and the details of 3rd batch of Student Learning objectives (SLOs)
- Search and mapping the online teaching materials to SLO (3 SLOs / member /week)
- Conduct quality inspection according to quality plan (3 SLOs / member /week)
- Update and submit the mapping results

- Review GS7 curriculum and the details of 4th batch of Student Learning objectives (SLOs)
- Search and mapping the online teaching materials to SLO (3 SLOs / member /week)
- Conduct quality inspection according to quality plan (3 SLOs / member /week)
- Update and submit the mapping results

- Review GS7 curriculum and the details of 5th batch of Student Learning objectives (SLOs)
- Search and mapping the online teaching materials to SLO (3 SLOs / member / week)
- Conduct quality inspection according to quality plan (3 SLOs / member /week)
- Update and submit the mapping results



- ✓ Verified online Teaching sources 3rd
 batch
- ✓ Updated Tracking sheet and related documents
 - ✓ Feb. 19th

- ✓ Verified online Teaching sources 4th
 batch
- ✓ Updated Tracking sheet and related project documents
 - ✓ March 10th

- ✓ Verified online Teaching sources 5th
 batch
- ✓ Updated Tracking sheet and related project documents.

✓ March 16th

2. Project Milestones and Deliverables (continued)

2.2 Project Milestones and Deliverables



KEY ACTIVITIES

8. Completion of 6th batch of SLOs – Circuits & Electric Current (13) and Investigating the space (11)

- Review GS7 curriculum and the details of 2nd batch of Student Learning objectives (SLOs)
- Search and mapping the online teaching materials to SLO (3 SLOs / member /week)
- Conduct quality inspection according to quality plan (3 SLOs / member /week)
- Update and submit the mapping results



- ✓ Verified online Teaching sources 6th batch
- ✓ Updated Tracking sheet



✓ March 19th



- 9. Acceptance of Project Final Report
- Collect and consolidate all deliverables, weekly status reports
- Capture the lessons learned from all members /recommendation for future development
- Prepare draft 1 report
- Review Darft1 and prepare draft 2
- Finalize and send Final report for Prof. review
- ✓ Approved Project Final Report
 - ✓ March 25

10. Complete the Video Presentation -VP

- Conduct brainstorming session for the design of the video presentation
- Prepare the 1st version of the VP
- Review version 1st and prepare 2nd Version
- Finalize the VP and submit to prof for feedback.
- Release to Client with the report
 - ✓ Accepted state of art VP
- ✓ April 3rd

- 11. Celebration Party
- Arrange for celebration party
- Celebrate with all team members and prof. (if possible) the success of the project

- ✓ Celebration (Project closure)
 - ✓ April 10th

3. Project Schedule and Management Plan – Gantt Chart

This section clearly defines and illustrates the project activities and tasks for each milestone in order to complete all deliverables, the estimated duration with start and end dates, sequence of activities and the responsible member(s) for completion. The schedule was developed in Ms project and Gantt chart was created (Appendix-A Project Time Schedule – Gantt Chart) which describes the activities for each stage in more details with clear timelines and responsibilities for team members.

For the online sourcing of the teaching material milestones and mapping to the SLOs, It will be performed in 6 batches; 2 units for each batch (total 12 units with 106 SLOs for GS7), each unit will be assigned to every member with SLOs mapping target of 3 SLOs/member/week.

The project manager will coordinate with all members on daily basis to monitor the progress based on the assigned tasks and targets that are determined for each member mainly for the online sourcing of the teaching materials. Accordingly the members will update the progress on the SLOs Mapping and Quality Tracking Sheet (Appendix-C) and asana toot (Appendix-H). Based on that the project manager will prepare the weekly status report which shows the actual progress % vs. the planned %, the completed tasks during previous week and the planned task for the next week and the identified risk and issues if any (Appendix-H).

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The tasks list for each milestone and estimated duration with start and end date and sequence of activities are shown below:

ID	Name	Duration	Start	Finish	Predecessors
1	Project Startup	8 days	January 23, 2018 8:00 AM	February 1, 2018 5:00 PM	
2	Project Kick-off Meeting	1 day	January 24, 2018 8:00 AM	January 24, 2018 5:00 PM	
3	Project Team Structure and Key-Roles	3 days	January 25, 2018 8:00 AM	January 29, 2018 5:00 PM	
4	Preparation of Bios of Members	4 days	January 29, 2018 8:00 AM	February 1, 2018 5:00 PM	
5	Acceptance of Project Plan	13 days	February 1, 2018 8:00 AM	February 18, 2018 5:00 PM	1
6	Collect All Requirements	4 days	February 1, 2018 8:00 AM	February 6, 2018 5:00 PM	
7	Prepare Draft Team Structure	5 days	February 7, 2018 8:00 AM	February 13, 2018 5:00 PM	6
8	Team Roles and Responsibilities	4 days	February 14, 2018 8:00 AM	February 19, 2018 5:00 PM	7
9	Communication Channels	4 days	February 20, 2018 8:00 AM	February 23, 2018 5:00 PM	8
10	Completion of 1st Batch of SLO's- Human Organ Systems & Transportation in Humans and Plants	13 days	February 1, 2018 8:00 AM	February 18, 2018 5:00 PM	5
11	Understand GS7 Curriculum and the details of 1st batch of Student Learning Objectives	4 days	February 1, 2018 8:00 AM	February 6, 2018 5:00 PM	
12	Searching and Mapping of the Online Teaching Materials	5 days	February 7, 2018 8:00 AM	February 13, 2018 5:00 PM	11
13	Conduct Quality Inspection according to Quality Plan	3 days	February 14, 2018 8:00 AM	February 16, 2018 5:00 PM	12
14	Update and Submit the mapping results	2 days	February 17, 2018 8:00 AM	February 18, 2018 5:00 PM	13
15	Completion of 2nd Batch of SLO's- Reproduction in Plants and Environment and Feeding Relationship	15 days	February 1, 2018 8:00 AM	February 21, 2018 5:00 PM	5
16	Understand GS7 curriculum and the details of the 2nd batch of Student Learning Objectives (SLO's)	4 days	February 1, 2018 8:00 AM	February 6, 2018 5:00 PM	
17	Searching and Mapping of the online teaching materials to SLO	7 days	February 7, 2018 8:00 AM	February 15, 2018 5:00 PM	16
18	Conduct Quality and Inspection according to the Quality Plan	2 days	February 16, 2018 8:00 AM	February 19, 2018 5:00 PM	17
19	Update and Submit the Mapping Results	2 days	February 20, 2018 8:00 AM	February 21, 2018 5:00 PM	18
20	Completion of 3rd Batch of SLO's- Water and Structure of an Atom	13 days	February 1, 2018 8:00 AM	February 19, 2018 5:00 PM	5
21	Understanding GS7 Curriculum and the details of 3rd batch of Student Learning Objectives	5 days	February 1, 2018 8:00 AM	February 7, 2018 5:00 PM	
22	Searching and Mapping of the online teaching materials to SLO	9 days	February 8, 2018 8:00 AM	February 20, 2018 5:00 PM	21
23	Conduct Quality Inspection according to the Quality Plan	2 days	February 21, 2018 8:00 AM	February 22, 2018 5:00 PM	22
24	Update and Submit the Mapping Results	22 days	February 23, 2018 8:00 AM	March 26, 2018 5:00 PM	23

25	Completion of 4th Batch of SLO's- Physical and Chemical Processes and Transmission of Heat	16 days	February 19, 2018 8:00 AM	March 10, 2018 5:00 PM	10
26	Understand GS7 curr iculum and the details of the 4th batch of Student Learning Objectives (SLO's)	6 days	February 19, 2018 8:00 AM	February 26, 2018 5:00 PM	
27	Searching and Mapping of the online teaching materials to SLO's	6 days	February 27, 2018 8:00 AM	March 6, 2018 5:00 PM	26
28	Conduct Quality Inspection according to Quality Plan	2 days	March 7, 2018 8:00 AM	March 8, 2018 5:00 PM	27
29	Update and Submit the Mapping results	2 days	March 9, 2018 8:00 AM	March 10, 2018 5:00 PM	28
30	Completion of 5th Batch of SLO's- Dispersion of Light and Sound Waves	17 days	February 22, 2018 8:00 AM	March 16, 2018 5:00 PM	15
31	Understand GS7 curriculum and the details of 5th batch of Student Learning Objectives (SLO's)	5 days	February 22, 2018 8:00 AM	February 28, 2018 5:00 PM	
32	Searching and Mapping of the online teaching materials to SLO	8 days	March 1, 2018 8:00 AM	March 12, 2018 5:00 PM	31
33	Conduct Quality Inspection according to Quality Plan	3 days	March 13, 2018 8:00 AM	March 15, 2018 5:00 PM	32
34	Update and Submit the Mapping Results	2 days	March 16, 2018 8:00 AM	March 19, 2018 5:00 PM	33
35	Completion of 6th Batch of SLO's- Circuits and Electric Current and Investigating the Space	20 days	February 20, 2018 8:00 AM	March 19, 2018 5:00 PM	20
36	Understand GS7 Curriculum and the details of 6th Batch of Student Learning Objectives (SLO's)	7 days	February 20, 2018 8:00 AM	February 28, 2018 5:00 PM	
37	Searching and Mapping of the Online Teaching Materials to SLO's	10 days	March 1, 2018 8:00 AM	March 14, 2018 5:00 PM	36
38	Conduct Quality Inspection according to Quality Plan	3 days	March 15, 2018 8:00 AM	March 17, 2018 5:00 PM	37
39	Update and Submit the Mapping Results	2 days	March 19, 2018 8:00 AM	March 20, 2018 5:00 PM	38
40	Acceptance of Project Final Report	5 days		March 25, 2018 5:00 PM	35
41	Collect and Consolidate all deliverables, weekly status and reports	3 days	March 20, 2018 8:00 AM	March 22, 2018 5:00 PM	
42	Capture the lessons learnt from all the members/recommendations for future development	1 day	March 23, 2018 8:00 AM	March 23, 2018 5:00 PM	41
43	Prepare 1st Draft of Report	1 day	March 26, 2018 8:00 AM	March 26, 2018 5:00 PM	42
44	Review Draft 1 and Prepare Draft 2	1 day	March 27, 2018 8:00 AM	March 27, 2018 5:00 PM	43
45	 Finalize and Send Final Report for Professor Review	1 day	March 28, 2018 8:00 AM	March 28, 2018 5:00 PM	44

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46	Complete the Video Presentation	7 days		April 3, 2018 5:00 PM	40
47	Conduct Brainstorming session for the design of the video presentation	1 day	March 26, 2018 8:00 AM	March 26, 2018 5:00 PM	
48	Prepare the 1st version of the Video Presentation	4 days	March 27, 2018 8:00 AM	March 30, 2018 5:00 PM	47
49	Review the 1st and Prepare the 2nd Version	2 days	April 2, 2018 8:00 AM	April 3, 2018 5:00 PM	48
50	Finalize the Video Presentation and Submit to Professor for feedback	1 day	April 4, 2018 8:00 AM	April 4, 2018 5:00 PM	49
51	Release to Client with the report	1 day	April 5, 2018 8:00 AM	April 5, 2018 5:00 PM	50
52	Celebration Party	1 day	April 4, 2018 8:00 AM	April 4, 2018 5:00 PM	46
53	Arrange for celebration party	1 day	April 10, 2018 8:00 AM	April 10, 2018 5:00 PM	
54	Celebrate with all team memebers and professor the success of the project	1 day	April 10, 2018 8:00 AM	April 10, 2018 5:00 PM	

The above tasks have been assigned to team members as shown below:

Task Name	Resource Name
Project Kick-off Meeting	Rafat Tahboosh
Project Team Structure and Key-Roles	All Team
Preparation of Bios of Members	All Team
Collect All Requirements	Taru Agarwal
Prepare Draft Team Structure	Rafat Tahboosh
Prepare Draft Team Structure	Diana Jaber
Team Roles and Responsibilities	All Team
Communication Channels	Alizeh Zaman
Completion of 1st Batch of SLO's- Human Organ Systems & Transportation in Humans and Plants	Diana Jaber
Completion of 1st Batch of SLO's- Human Organ Systems & Transportation in Humans and Plants	Rafat Tahboosh
Understand GS7 Curriculum and the details of 1st batch of Student Learning Objectives	Diana Jaber
Understand GS7 Curriculum and the details of 1st batch of Student Learning Objectives	Rafat Tahboosh
Searching and Mapping of the Online Teaching Materials	Diana Jaber
Searching and Mapping of the Online Teaching Materials	Rafat Tahboosh
Conduct Quality Inspection according to Quality Plan	Diana Jaber
Conduct Quality Inspection according to Quality Plan	Rafat Tahboosh
Update and Submit the mapping results	Diana Jaber
Update and Submit the mapping results	Rafat Tahboosh
Completion of 2nd Batch of SLO's- Reproduction in Plants and Environment and Feeding Relationship	Alizeh Zaman

Task Name	Resource Name
Completion of 2nd Batch of SLO's- Reproduction in Plants and Environment and Feeding Relationship	Jithin John
Understand GS7 curriculum and the details of the 2nd batch of Student Learning Objectives (SLO's)	Alizeh Zaman
Understand GS7 curriculum and the details of the 2nd batch of Student Learning Objectives (SLO's)	Jithin John
Searching and Mapping of the online teaching materials to SLO	Alizeh Zaman
Searching and Mapping of the online teaching materials to SLO	Jithin John
Conduct Quality and Inspection according to the Quality Plan	Alizeh Zaman
Conduct Quality and Inspection according to the Quality Plan	Jithin John
Update and Submit the Mapping Results	Alizeh Zaman
Update and Submit the Mapping Results	Jithin John
Completion of 3rd Batch of SLO's- Water and Structure of an Atom	Stephanie
Completion of 3rd Batch of SLO's- Water and Structure of an	L .
Atom	Taru Agarwal
Understanding GS7 Curriculum and the details of 3rd batch of Student Learning Objectives	Taru Agarwal
Understanding GS7 Curriculum and the details of 3rd batch of Student Learning Objectives	Stephanie
Searching and Mapping of the online teaching materials to SLO	Taru Agarwal
Searching and Mapping of the online teaching materials to SLO	Stephanie
Conduct Quality Inspection according to the Quality Plan	Taru Agarwal
Conduct Quality Inspection according to the Quality Plan	Stephanie
Update and Submit the Mapping Results	Taru Agarwal
Update and Submit the Mapping Results	Stephanie
Completion of 4th Batch of SLO's- Physical and Chemical Processes and Transmission of Heat	Diana Jaber
Completion of 4th Batch of SLO's- Physical and Chemical Processes and Transmission of Heat	Rafat Tahboosh

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Task Name	Resource Name
Understand GS7 curriculum and the details of the 4th batch of Student Learning	
Objectives (SLO's)	Diana Jaber
Understand GS7 curriculum and the details of the 4th batch of Student Learning	
Objectives (SLO's)	Rafat Tahboosh
Searching and Mapping of the online teaching materials to SLO's	Diana Jaber
Searching and Mapping of the online teaching materials to SLO's	Rafat Tahboosh
Conduct Quality Inspection according to Quality Plan	Diana Jaber
Conduct Quality Inspection according to Quality Plan	Rafat Tahboosh
Update and Submit the Mapping results	Diana Jaber
Update and Submit the Mapping results	Rafat Tahboosh
Completion of 5th Batch of SLO's- Dispersion of Light and Sound Waves	Alizeh Zaman
Completion of 5th Batch of SLO's- Dispersion of Light and Sound Waves	Jithin John
Understand GS7 curriculum and the details of 5th batch of Student Learning	
Objectives (SLO's)	Alizeh Zaman
Understand GS7 curriculum and the details of 5th batch of Student Learning	
Objectives (SLO's)	Jithin John
Searching and Mapping of the online teaching materials to SLO	Alizeh Zaman
Searching and Mapping of the online teaching materials to SLO	Jithin John
Conduct Quality Inspection according to Quality Plan	Alizeh Zaman
Conduct Quality Inspection according to Quality Plan	Jithin John
Update and Submit the Mapping Results	Alizeh Zaman
Update and Submit the Mapping Results	Jithin John
Completion of 6th Batch of SLO's- Circuits and Electric Current and Investigating	
the Space	Taru Agarwal
Completion of 6th Batch of SLO's- Circuits and Electric Current and Investigating	
the Space	Stephanie
Understand GS7 Curriculum and the details of 6th Batch of Student Learning	
Objectives (SLO's)	Taru Agarwal
Understand GS7 Curriculum and the details of 6th Batch of Student Learning	
Objectives (SLO's)	Stephanie
Searching and Mapping of the Online Teaching Materials to SLO's	Taru Agarwal
Searching and Mapping of the Online Teaching Materials to SLO's	Stephanie

Task Name	Resource Name
Conduct Quality Inspection according to Quality Plan	Taru Agarwal
Conduct Quality Inspection according to Quality Plan	Stephanie
Update and Submit the Mapping Results	Taru Agarwal
Update and Submit the Mapping Results	Stephanie
Collect and Consolidate all deliverables, weekly status	
and reports	Rafat Tahboosh
Capture the lessons learnt from all the	Ctanhania
members/recommendations for future development	Stephanie
Prepare 1st Draft of Report	Diana Jaber
Review Draft 1 and Prepare Draft 2	All Team
Finalize and Send Final Report for Professor Review	Alizeh Zaman
Conduct Brainstorming session for the design of the	A II -
video presentation	All Team
Prepare the 1st version of the Video Presentation	Taru Agarwal
Prepare the 1st version of the Video Presentation	Jithin John
Prepare the 1st version of the Video Presentation	Alizeh Zaman
Review the 1st and Prepare the 2nd Version	Rafat Taboosh
Review the 1st and Prepare the 2nd Version	Diana Jaber
Review the 1st and Prepare the 2nd Version	Stephanie
Finalize the Video Presentation and Submit to	
Professor for feedback	Taru Agarwal
Finalize the Video Presentation and Submit to Professor	
for feedback	Jithin John
Finalize the Video Presentation and Submit to Professor for feedback	Alizeh Zaman
Release to Client with the report	Taru Agarwal
Release to Client with the report	Alizeh Zaman
Release to Client with the report	Jithin John
Celebration Party	All Team
Arrange for celebration party	All Team
Celebrate with all team memebers and professor the	
success of the project	All Team

4. Communications Management Plan

4.1 Purpose

To ensure a successful Team 5 GS7 project implementation, Communications Management Plan is critical to ensure project scope is achieved. The Communications Management Plan documents the procedure Team 5 will be following to ensure effective project coordination. The plan details how effective communications will take place within the project team, with the project client, and with Professor Peter Carr.

The Communications Management Plan's intended audience is the project manager, project team members and project client; effective communication among whom is critical for the success of this project.

4.2 Communication Management Process

The Communications management process establishes an orderly and effective procedure for both internal and external team communications (Section Project Team Structure. It outlines the single point of contact in case of escalation procedure, that is the project manager.

The Communications Management plan identifies the single point of contact which the team has in place, in case of team communication with the client, that is, the Communications Manager.

The team internal and external communication methodology, purpose and channels are summarized as follows:

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4. Communications Management Plan (continued)

Communications Plan	Methodology / Purpose / Channel
Internal Communication: Daily in case of any update or follow-up using WhatsApp group, emails and telephonic conve	
	Weekly meetings are held in every Saturday 2:00 to 5:00 PM in UW-Dana Porter Library collaboration room # 608
	Asana team collaboration and project tracking tool which is used for tasks allocation and team chat rooms (Ref. to Appendix H for example of using Asana)
	Internal team drop box is created for sharing project documents
External (with stakeholders):	Weekly meetings with Professor Peter Carr every Tuesday at 7:40 PM, classroom RCH 309
	Alizeh the Communications Manager has been assigned to be the representative of team 5 in biweekly meetings with client (If conducted).
	Weekly progress reports will be submitted by project manager to Professor Carr using team 5 drop box on learn.
	Final project report and video presentation will be submitted to Professor Peter Carr by April 3 rd
Escalation Procedure:	In case of any concern related to the project, team members will discuss the concern with the Project Manager who will discuss and escalate (when necessary) with the concerned stakeholders.

4.3 Communications with other stakeholders

Team Members	Role	Emails	Mobile Numbers
Rafat Tahboosh	Project Manager	rtahboosh@uwaterloo.ca	6472743944
Alizeh Zaman	Communication Manager	a7zaman@waterloo.ca	5195017519
Diana Jaber	Quality Manager	d2jaber@uwaterloo.ca	5195779785
Jithin John Mathews	Research Manager	jj4mathe@uwaterloo.ca	2268992844
Taru Agarwal	Operations Manager	t3agarwa@uwaterloo.ca	
Stephanie Wu (Jing Wu)	Development Manager	j425wu@uwaterloo.ca	5197812789
Prof. Peter Carr	Project Sponsor	pdcarr@uwaterloo.ca	519-888-4567 x33990, CPH 3637

5. Change Management Plan

5.1 Purpose of the Change Management Plan

To ensure a successful TWF Team 5 GS7 project implementation, Change Management is a critical process to ensure project scope is achieved with scope creep, project schedule is on target, Quality is achieved without compromised.

The Change Management Plan documents and tacks the necessary information required to effectively manage TWF Team 5 GS7 project change from project inception to delivery.

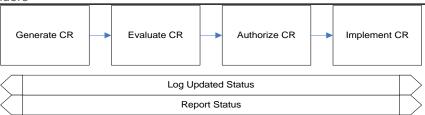
The Change Management Plan is created during the Planning Phase of the TWF Team 5 GS7 project. Its intended audience is the project manager, project team, project sponsor and any senior leaders whose support is needed to carry out the plan.

5.2 Change Management Process

The Change Management process establishes an orderly and effective procedure for tracking the submission, coordination, review, evaluation, categorization, and approval for release of all changes to the TWF Team 5 GS7 project's baselines.

5.2.1 Change Request Process Flow Requirements

Step	Description			
Generate CR	A submitter completes a CR Form and sends the completed form to the Change Manager			
Log CR Status	The Change Manager enters the CR into the CR Log. The CR's status is updated throughout the CR process as needed.			
Evaluate CR	Project personnel review the CR and provide an estimated level of effort to process, and develop a proposed solution for the			
	suggested change			
Authorize	Approval to move forward with incorporating the suggested change into the project/product			
Implement	If approved, make the necessary adjustments to carry out the requested change and communicate CR status to the submitter and			
·	other stakeholders			



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5. Change Management Plan (continued)

5.2.2 Change Request Form and Change Management Log

Appendix D Change Request Form and **Appendix D** Change Management Log will be used for the implementation of the change management process.

5.2.3 Evaluating and Authorizing Change Requests

Change requests are evaluated using the following Category criteria:

Category	Description
Mandatory	The change is necessary to meet legislative or regulatory needs
Critical	The change is urgently needed for the project to meet its objectives
Necessary	There is good reason to proceed with the change, and the benefit of doing the change has the potential to be greater than the impact to the project.
Desirable	The change would be nice to have if it does not negatively impact the overall project

Change requests are evaluated and assigned one or more of the following change types:

Туре	Description
Scope	Change affecting scope
Schedule	Change affecting schedule
Cost	N/A
Requirement	Change affecting requirement
Resources	Change affecting resources
Deliverables	Change affecting deliverables
Document	Change affecting document
Process	Change affecting process
Quality	Change affecting quality

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5. Change Management Plan (continued)

Change requests are evaluated and assigned one of the following status types:

Status	Description	
Open	Entered/Open but not yet approved or assigned	
Work in Progress	CR approved, assigned, and work is progressing	
In Review	CR work is completed and in final review prior to testing	
Testing	CR work has been reviewed and is being tested	
Closed	CR work is complete, has passed all tests, and updates have been released.	

Change Control Board who will decide on the final status of the change request in case of escalation:

Role	Name	Contact	Description	
Executive Sponsor	Omer Faheem		Director, Technology Integration, Idara-e-Taleem-	
			o-Aagahi	
			Approver for Mandatory and Critical changes	
Professor	Prof. Peter Carr		Contact from University of Waterloo with Client	
Project Manager with the	Rafat Tahboosh	647-274-3944	Approver for Mandatory, Critical and Necessary	
coordination of team members			changes	

6. Quality Management Plan

6.1 Purpose of the Quality Management Plan

The purpose of the Quality Management Plan is to describe how quality will be managed throughout the lifecycle of the project. It also includes the processes and procedures for ensuring quality planning, assurance, and control are all conducted. Team 5 GS Grade 7 Quality Management Plan focuses on Plan-Do-Check-Act through quality planning, quality control, quality assurance and quality improvement.

6.2 Quality Planning – Includes quality standards and approach.

Quality Standards: All deliverables should be a. Accurate b. Correct c. Conforms to QA & QC KPIs.

Quality Approach: Quality review evaluation method for deliverables -> QC & for processes -> QA

6.3 Quality Control – to ensure quality deliverables are correctly completed and accepted. The following table indicates the quality control measurements, responsibilities and frequency.

Project Deliverable	Deliverable Quality Standards/ Completeness and Correctness Criteria	Quality Control Actor	Frequency/Interval
Project Management Plan	QC1. Reflects actual work (%100)	Team Review Quality Manager Review Project Manager Review Customer/Sponsor Review	3 times (First, Second & Last Version) Weekly Twice a Month (1& 15 of each month) Twice (First and Last Version)
Project Status Reports	QC2. Complete and aligned with actual project schedule (100%)	Team Review Quality Manager Review Project Manager Review	Once a week (Saturday) Once a week (Saturday) Once a week (Saturday)
Project Final Report and Final Project Presentation	QC3, QC4. Accurately aligned with the project management plan and real deliverables. (100%)	Team Review Quality Manager Review Project Manager Review Customer/Sponsor Review	2 Times (20 March, 23 March) 3 Times (20 March, 23 March, 24 March) 2 Times(20 March, 23 March) 1 Time (24 March)
SLO – Resource Mapping Matrix	QC5. Resources comforts the quality check (%95) as per Appendix C	Team Review Quality Manager Review Project Manager Review Customer/Sponsor Validation	Self review & peer review (Weekly) 1 Time after each unit completion 1 Time upon completion 1 Time upon delivery

6. Quality Management Plan (continued)

6.4 Quality Assurance — to ensure quality deliverables are correctly completed and accepted. The following table shows the quality assurance

measurements, quality assurance control actors and frequency.

Project Deliverable	Deliverable Quality Standards/ Completeness and Correctness Criteria	Quality Control Actor	Frequency/Interval
Develop/Refine Project Management Plan	QA1. Compliance with framework, PMBOK V6 (%80)	Team Review Quality Manager Review Project Manager Review Customer/ Sponsor Review	3 times (First, Second and Last Version) Weekly Twice a Month (1& 15 of each month) Twice (First and Last Version)
Execute and Control Project as Project Management Plan	QA2. Compliance with framework, PMBOK V6 (%90)	Team Review Quality Manager Review Project Manager Review	Weekly, each Saturday Weekly, each Saturday & Sunday Weekly, each Saturday & Sunday
Approve Each Project Stage	QA3. Compliance with framework, PMBOK V6 (%80)	Team Review Quality Manager Review Project Manager Review	Once upon delivering the project stage Twice (upon delivery before submission) Twice (upon delivery before submission)
Close Project and Final Project Review	QA4. Compliance with framework, PMBOK V6 (%90)	Team Review Quality Manager Review Project Manager Review Customer/Sponsor Review	Once upon delivering the project stage Twice (upon delivery before submission) Twice (upon delivery before submission) Once upon completion (25 March)

6.5 Quality Team Responsibilities

Responsibilities	Project Customer Omer Faheem (TWF)	Project Manager Rafat Tahboosh	Quality Manager Diana Jaber	Team Part 9 – Team Structure
QA	C, (R Final Approval)	R	Α	R
QC	C, (R Final Approval)	R	A	R

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6. Quality Management Plan (continued)

6.6 Quality Improvement and Change Management

Quality improvement and change management processes are important to ensure efficiency of the QA and QC processes when change requests are identified or in case any issues are encountered.

- <u>Issues:</u> caused by exceeding performance measurements stated in QA and QC plans. A corrective action should be taken in place within 24 hours by the team otherwise escalated to the project manager. Quality Manager will be responsible for addressing the issues and coordinating all the efforts to resolve them.
- <u>Changes to Quality Management Plan:</u> Quality Management Plan to be reviewed by Quality Manager and PM on bi-weekly basis. Any improvement or change should follow the change management process as stated in section 5.

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7. Issue and Risk Management Plan

Any project irrespective of its size and scope, meets evolving challenges and risks along its way. Our project is no different. The objective, then, of Risk and Issue Management is to provide the Project Manager and the team the tools and means to **identify**, **assess**, **control** and **respond** to such risks and issues.

We as a team have identified **the following risks** to the efficient handling of our project. These risks are in the process of being handled. As the project is **challenging** and **ever-evolving**, we expect and anticipate more risks to cross our paths, hence the **risk log (Appendix-F)** is evolving work in progress. Any risks that get realized will be subsequently added on to the **Issue Log (Appendix-F)** and dealt with accordingly.

- 1. Team assigned Grade 3 General Science, though the syllabus for the same not provided by client. If further delay happens in the right assignment of project, team productivity and milestones may take a hit. (Resolved and the team has been assigned for GS7)
- 2. Milestone deadline accepted might coincide with other academic work of the team members (since all project members are full-time students), like **Mid-term exams**, especially in month of February. This might hinder the team's ability to work productively and deliver on the promised milestones.
- 3. The **risk of sporadic communication channels with actual client**, TWF (due to time difference and other anticipated reasons), can cause a mismatch of client needs and the effort and deliverables being worked on here by the team.
- 4. Since the project and deliverables will find users among a wide spectrum of teachers in Pakistan, the compatibility and integrity of the sources collected to those of the clients is a risk factor looming above. Since almost all sources are sourced in English, language barrier could be a risk that would prevent the full impact of our deliverables.
- 5. Risk of compiling the multitude of sources to back the SLOs (Student Learning Outcomes) in a final Excel worksheet, is immense and cannot be ignored. The large number resources found for each SLO when compiled into a single worksheet can cause **potential software crash or immense lag in the working document**, effectively reducing the usability of the final deliverable.

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7. Issue and Risk Management Plan (continued)

- 6. While compiling and collecting sources for the various SLOs, the need for video resources is high as it helps get the topic across to students in a more compelling way. But the risk associated with that is high as well. **Risk of copyright infringement** for selecting and collecting videos not based on Creative Commons rights.
- 7. Integrity of resources compiled. The links that we collect and compile for the client in the final report has to have high integrity. Any broken links and unauthorised sources no helpful resources and worst of, wrong information.
- **8.** Risk of Rejection of deliverables. There always exist a risk of the team's deliverables being rejected from the client side for not meeting expectations and needs. This risk is further amplified due to an adjoining risk mentioned above, sporadic communication channels with actual client.
- **9. Unforeseen personal circumstances** of individual team members are something that can slightly derail the milestone achievements. This has to be ideally dealt with without impacting the team morale.

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8. Human Resources Management Plan

Team 5 members' competencies, skills and professional experience were documented and summarised in members' **profiles in Appendix B**. These competencies and skills were reviewed during the team initial meeting and accordingly the members agreed to perform various roles as shown in the **Project Team Structure Fig. (1)**. This structure also illustrates the key responsibilities/activities that will be assigned to each role including the interaction with the client and sponsor.

The Project Manager (Rafat); will manage the overall activities of the project according to the accepted project management plan, monitor and present the progress, resolve any issues and manage the risks with all stakeholders.

The Communication Manager (Alizeh); will be the single point of contact with the client in Pakistan (if necessary), supported by the project manager. Additionally, she will manage the team communications according to the communication plan (Sec. 3.0), coordinate the team meetings and follow-ups.

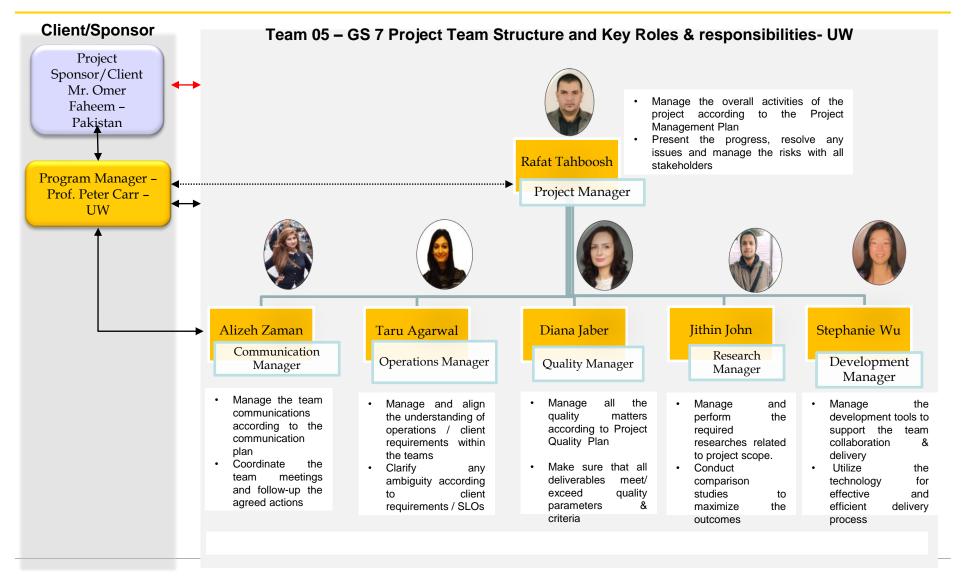
The Operations Manage (Taru); will align the understanding of operations based on requirements within the team members and clarify any ambiguity related to GS Grade 7 curriculum and the related students learning outcomes.

The Quality Manager (Diana); will manage all the quality matters according to the Project Quality Plan (Sec. 7.0) and make sure that all deliverables meet/ exceed the quality parameters, acceptance criteria and client preferences.

The Research Manager (Jithin); will manage and perform the required researches related to project scope and support the team members by conducting comparison studies to maximize the outcomes.

The Development Manager (Stephanie); will manage the developmental tools to support the team collaboration & delivery and utilize the technology for effective and efficient delivery process.

8. Human Resources Management Plan (continued)



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8. Human Resources Management Plan (continued)

In addition to such managerial roles for the team members, they agreed to participate in the operations of sourcing the required online teaching materials for GS G 7 curriculum (106 Students Learning outcomes) in order for the ultimate goal of the project to be achieved and satisfy the client in Pakistan. The PM with coordination of team members will reallocate the resources based on the progress and in case of any approved change.

The team members' progress against the individual targets (e.g.; Online sourcing and mapping 3 SLOs per week / per member) and the assigned tasks based on the weekly meetings will be monitoring and managed through collaboration & progress tracking tool called "Asana" using task assignments, Kanban and progress boards" which will be maintained by project manager and used to prepare the weekly status report. **Appendix-H 'Snapshot of** Asana **task follow-up and progress Board'.**

During their initial meeting and in order for the team to perform and deliver in a teamwork environment as colleagues and friends in University of Waterloo community, all members agreed upon values which will act as **rules** to govern the team's interaction, meetings, discussions and conflicts (if any).

These values are linked to the members' first names (To be remembered always) as follows:

Rafat: **Respect** between members is the base of the work within the team.

Taru: **Trust** between team members will make our job easy.

Stephanie: **Synergy** between team members, will make us more effective.

Diana: **Dedication** from all members, will contribute to the success for our project.

Alizeh: Alliance to complete the team's mission and deliver successfully.

Jithin: Joint effort will add value to the quality of our deliverables.

9. Project Success Factor

- 1. Working according to the agreed upon team 5 values (Respect, Trust, Synergy, Dedication, Alliance and Joint effort)
- 2. Clear and open communications between PM, members and project stakeholders.
- 3. Attendance of all team regular meetings and when required based on the project progress.
- 4. Timely submittal of internal tasks and quality deliverables with the required quality
- 5. Perform all the required QC activities against the quality plan and acceptance criteria
- 6. Sponsorship and client support.

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10. Project Sponsor and Professor Acceptance

This project management plan that was submitted by Team 5, GS 7 was reviewed and accepted by the project sponsor and client:

#	Approval By	Designation	Signature	Date
1.0	Mr. Omer Faheem	Director, Technology Integration, Idara-e-Taleem-o-Aagahi		
2.0	Prof. Peter Carr	Project Sponsor		

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11. List of Appendixes (Attachments)

The below list of Appendices (Attached) are considered an integral part of this document (PMP):

- ► Appendix A: Project Time Schedule Gantt Chart
- ► Appendix B: Project Team Members Profiles (Bios)
- Appendix C: SLOs Mapping and Quality Tracking Sheet
- Appendix D: Project Change Request
- Appendix E: Project Change Requests log
- Appendix F: Project Risk and Issue Log
- Appendix H: Weekly Status Report & Asana 'Collaboration & project tracking tool'