

**PROJECT MANAGEMENT
FOR
SOFTWARE ENGINEERS**

**THE PM'S
QUICK START GUIDE**

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PREFACE

This quick reference guide provides you with all of the key points and important learning takeaways to help you leverage your learning experience immediately after completing my course.

The structure of the guide is organized by module and by clip. In the event you need more information or wish to rewatch a portion of my course, you will have the module and clip references so you can easily do so.

Refer to the Table of Contents below to help you quickly find what you need.

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MODULE I - LEADING SOFTWARE ENGINEERING PROJECTS

CLIP 1 – COURSE OVERVIEW

I. Course goal:

- a. Learn practical project management approaches and techniques to enhance your leadership and outcomes of your software development team.

2. There are many advantages and benefits of growing your project management and leadership skill base, here are a few:

- b. PM skills are in high demand across many industries. Developing a robust PM skillset will increase your career opportunities by providing not only your software expertise, but in addition, practical project management best practices.
- c. PM and PL skills will enhance your ability to produce tangible deliverables that you can quickly apply to your software project. Those will include soft skills, such as communication & leadership, and physical deliverables such as project planning artifacts.
- d. With these practical skills, you can optimize your software project outcomes, while at the same time not being bogged down in PM activities to where you lose sight of developing software.
- e. Overall, with just the right number of pm/pl skills, you will produce higher quality software deliverables that you can readily integrate into your daily work.

CLIP 2 – THE POWER OF LEADERSHIP

I. Leadership, a definition:

- a. The action of leading a group of people or an organization to a common set of goals.
- b. Remember, you are helping customers to better understand their requirements through an iterative and incremental process.

2. Leadership, a definition I like more:

- a. Leadership is the ability to guide others in a direction or decision that leaves them still feeling empowered and accomplished.

3. Leadership, a quote:

- a. “Before you are a leader, success is all about growing yourself. When you become a leader, success is all about growing others.”
- b. Growing others is key. Please keep that in mind.

4. How leaders build trust, a checklist:

- a. Be open, fair, and listen.

- b. Admit your mistakes.
- c. Support all team members.
- d. Take responsibility for team actions.
- e. Be sensitive to the needs of team members.
- f. Trust is leadership currency. Please keep that in mind.

5. How leaders build confidence, a checklist:

- a. Provide clear and consistent goals and expectations.
- b. Be decisive.
- c. Delegate with confidence.
- d. Champion communication and collaboration.
- e. Create a safe environment for mistakes and risks.
- f. Build and inspire team self-confidence.
- g. A team's confidence drives positive and productive outcomes. Please keep that in mind.

CLIP 3 – IS YOUR TEAM CONFIDENT IN YOU?

1. Characteristics of a team leader – You!

- a. Embrace and champion change.
- b. Earn credibility with all team members.
- c. Desire to lead projects AND people.
- d. Strong communications and marketing skills.
- e. Strong negotiation skills.
- f. Project and team management skills.

2. Leadership is everywhere!

- a. Leadership permeates everything you do when you are managing a software project. Please keep that in mind.

CLIP 4 – BOOSTING OUTCOMES WITH COMMUNICATION

1. Your potential as a leader will be dependent upon your ability to effectively communicate with others.

- a. One of the biggest takeaways from this course! Please keep this in mind.

2. The right communication:

- a. Helps manage stakeholder expectations. The customer/stakeholder should never be wondering about how the project is going.
- b. Builds confidence in the project team. Your team should not be wondering about what to do next, and your manager should not be in the dark about your project's progress either.
- c. So, the right communication better ensures critical project outcomes and may just ensure your success.

3. Do as I say:

- a. I know that “walk like you talk” is a well-used cliché, but that is why it is well-used: it is true!
- b. Actions are your most authentic message.
- c. Actions must align with your words.
- d. Rely on trusted colleagues for feedback.

4. Make the complex simple:

- a. Simplicity is powerful and necessary.
- b. Distill complexity to simplicity.
- c. Be sure to understand what you are saying.
- d. Say what you mean in as few words as possible.

CLIP 5 – FIND YOUR STRIDE

I. Be unique, be the real you: find your stride!

- a. Use language that is distinctly your own.
- b. Let your values come through.
- c. Be genuine and people will respect you for it.
- d. Definition: Your stride is WHO you are and how you act. Please keep that in mind.

2. Be available and visible:

- a. Let your colleagues get a feel for who you are.
- b. Be visible interacting with colleagues.
- c. People need to feel a personal connection.
- d. Do regular “walkarounds.”
- e. Show you are engaged and care about them.

3. “It is wise to act, but wiser to listen.” – Ben Franklin

- a. Listen and hear what is coming back at you.
- b. Effective communication is two-way.
- c. Know how to ask good questions: then listen.
- d. Body language may tell you everything.

4. Always be enthusiastic:

- a. Yes, this is a tough one but try!
- b. "Success is the ability to go from one failure to another – with no loss of enthusiasm." - Winston Churchill.

CLIP 6 – LEVERAGING STAKEHOLDER COLLABORATION

I. Collaboration, a definition, and its intention:

- a. Definition:
 - i. Collaboration is a partnership; a union; the act of producing or making something together.
- b. Intention:
 - i. Collaboration sets the right frame of mind that I want you to have when working with stakeholders, or anyone for that matter. Please keep that in mind.

2. Stakeholder, a definition:

- a. Stakeholders are individuals or groups who have a personal stake in the project's outcome, either positively or negatively, or who can influence its success.

3. Stakeholder perspectives and contributions:

- a. Stakeholders come from all around your organization. Develop a matrix or chart that helps you understand their needs, perspectives, and what contributions you need from them, such as:
 - b. First, their involvement:
 - i. Stakeholders actively participate in the project, providing input and feedback throughout the development lifecycle. (Or they may have a more passive involvement such as an)
 - c. Their influence:
 - i. They can significantly impact the project's direction and success through their decisions, requirements, or support.
 - d. Their diverse perspectives:
 - i. Stakeholders represent different viewpoints, including users, customers, business representatives, and technical teams, each with their own needs and expectations.
 - e. There are internal stakeholders:

- i. Those are individuals or groups within your organization, such as project managers, business leaders, and senior management.
- f. And lastly, external stakeholders:
 - i. Such as Individuals or groups outside of your organization, such as customers, end-users, vendors, contractors, and regulatory bodies.

4. Managing stakeholder expectations:

- a. Effective stakeholder management involves understanding their needs, communicating project progress, and addressing concerns to ensure their satisfaction all through collaborative approach.
- b. By identifying and engaging with stakeholders effectively, project teams can ensure that the final product aligns with their needs, leading to a more successful and impactful software project.

5. Develop a stakeholder action plan:

- a. Identify all potential stakeholders before you start your project. Stakeholders can come and go, so keep the list active. Such as name, job title, where they sit in the organization, etc.
- b. Classify their role or roles in your project based on their involvement, what influence do they have, what are their viewpoints and expectations, are they internal to your organization, or are they external to your organization. This is just a short list: Add other attributes that makes sense to you.
- c. Remember, these are the people you are working for and therefore must deliver software on time and on budget. Work towards a close and cooperative relationship.
- d. This action plan will give you a solid understanding and grasp on how best to lead and communicate to your stakeholders, and how best to guide your team's appreciation of the requirements and setting the optimal priorities.

6. Tips for managing stakeholder expectations:

- a. Acquire buy-in not only from stakeholders for the requirements, but your team as well as to the processes and tools you will be using to get your job done.
- b. Take care of business. That is, get work done efficiently.
- c. Communicate the vision that you want to see for you and the stakeholders.
- d. Be a good listener.
- e. See the stakeholder's viewpoint.
- f. Never, ever assume. Ask questions, dig deeper, and listen more.
- g. Keep focused on priorities. Do not get sidetracked.

CLIP 7 – ESSENTIAL WRITING AND SPEAKING SKILLS

I. Quote implying how important it is to improve your writing skills.

- a. "No one really wants to read a document - they just want to know what it says."

2. Think and plan about not just what you are going to write and say, but HOW, by using Michael's 5 C's in everything you do.

- a. Be clear.
- b. Be concise.
- c. Be courteous.
- d. Be consistent.
- e. And be compelling in everything you say and write.

3. An important quote:

- a. "Get rid of half of the words you write, then get rid of half of what's left."
- b. In other words: LESS is MORE.

CLIP 8 – MOST IN-DEMAND SKILLS

I. The most in-demand skills are now and will be (by order of importance):

- a. Communication.
- b. Customer Service.
- c. Leadership.
- d. Project Management.

MODULE 2 - APPLYING PM PRACTICES WHILE LEADING YOUR SOFTWARE PROJECT

CLIP 1 – SUCCESSFULLY COMMUNICATING TO OTHERS

I. "The single biggest problem in communication is the illusion that it has taken place."

- a. The need for clear and effective communication within the project team and with stakeholders is essential to your success. And that will best happen with the right mix of leadership and communications skills.

2. Leading effective meetings

- a. Always have an agenda, no exceptions.
- b. Know your expected outcome. Know your purpose well.
- c. List your agenda items to discuss to ensure your outcome is better determined.
- d. Determine who needs to be there.

- e. Always take meeting notes:
 - i. Who attended.
 - ii. Agreements and actions (who and when due).
 - iii. Note taking ensures accountability and keeping your project on track.

CLIP 2 – THE ART OF PRESENTATIONS

I. Presentation development and delivery guidance:

- a. Know your audience. Get a really good idea of who will be there and what THEY may expect from it.
- b. Have the outcome in mind before you start writing your presentation.
- c. Open with something surprising or intriguing to make it more compelling.
- d. Ensure they understand why they are there.
- e. Maintain good eye contact to better engage your audience.
- f. Do not hand out the presentation. Let them discover what you want to say from YOU directly speaking.
- g. Follow Michael's 5 C's, of course!

2. The miracle of stand ups

a. Benefits:

- i. Real time feedback on project activities.
- ii. Early avoidance of issues or problems.
- iii. Get a 'pulse' of the team.

b. Process:

- i. Quickly go around the room.
- ii. What have you done since yesterday?
- iii. What are you planning to do today?
- iv. Do you have any problems today?

c. Use them as much as you think they are needed. Never hesitate to do so.

3. The wonder of walkarounds

- a. Walkarounds create opportunities to discover new and interesting things from your teammates, stakeholders, and managers, which may not come up or be apparent in more formal settings.

- b. Casual 'drop in' visits.
- c. Just 3 minutes on the way to get coffee or a quick errand.
- d. Use your favorite platform for an E-drop in if they are not easy to reach.
- e. Be careful not to be disruptive.
- f. This really boosts morale.

4. Creating readable status updates

- a. Why send status updates?
 - i. Inform your customer on project progress.
 - ii. Missing status updates are unprofessional.
- b. Consistently status your:
 - i. Stakeholders.
 - ii. Team members.
 - iii. Management.
- c. Each update is tailored for each audience:
 - i. For stakeholders, more business oriented.
 - ii. For your dev team, more technical.
 - iii. For your manager, more accomplishment oriented.
 - iv. And yes, their contents will overlap and can be leveraged.
- d. Quality updates impart professionalism and trust.
- e. Always follow Michael's 5 C's, of course!

CLIP 3 – THE BASICS OF PROJECT CONTROL

I. A great quote:

- a. "Effective projects control changes; ineffective projects allows changes to control them."
- b. Trust me, your project has a very high potential of failing if you do not apply the appropriate project controls.

2. A definition:

- a. Project control are the tools and processes employed to monitor and measure the progress of a project.

3. Your stakeholders will ask you:

- a. Are we on budget?
- b. Do you think we will meet the schedule?
- c. Are we meeting the customers' expectations?
- d. Do you have an answer for them? Be ready, so apply project controls.

CLIP 4 – THE IMPORTANCE OF REQUIREMENTS MANAGEMENT

1. What Is requirements management?

- a. Requirements management is the process of identifying the “what.”
- b. Requirements are identified, tracked, and managed throughout your project’s lifecycle.
- c. This is a stakeholder and customer-facing activity.
- d. The process delivers an initial requirements specification (and subsequent revisions).
- e. Typical process in Agile, traditional, or blended projects.
- f. There are many product solutions on the market.

2. Why do requirements management?

- a. Requirements are a moving target therefore you must formally manage them.
- b. Accept and embrace change: that is the business world, and in fact life in general.
- c. Use Agile, Kanban, and Scrum methods for requirements management.
- d. Is every requirement worthy of developing? Not necessarily but track it anyway!
- e. When should the initial process end? When you have reached the most basic version of a product. Also known as the minimal viable product (MVP).
- f. Requirements management better ensures quality requirements. Please remember that.

3. Why do requirements management?

- a. Develop a roadmap.
- b. Manage all requirements throughout the project.
- c. Requirements intake – have a single point of entry (period).
- d. Identify all eligible stakeholders and develop your stakeholder matrix.
- e. Did I miss any stakeholders? You might find more as you build out the requirements. Add them to your matrix.
- f. Review, analyze, prioritize each requirement to ensure you understand them.
- g. Use visual tools to better engage stakeholders (and your team)!

CLIP 5 – THE VALUE OF CHANGE MANAGEMENT

I. Definition:

- a. Refers to readily available, pre-packaged solutions that can be purchased and used immediately, usually with minimal customization.

CLIP 6 – SETTING UP PROJECT CONTROL DASHBOARDS

I. Definition:

- a. Refers to readily available, pre-packaged solutions that can be purchased and used immediately, usually with minimal customization.

CLIP 7 – TIPS FOR EFFECTIVE PROJECT MANAGEMENT

I. Definition:

- a. Refers to readily available, pre-packaged solutions that can be purchased and used immediately, usually with minimal customization.

MODULE 3 – BALANCING YOUR TECHNICAL CONTRIBUTION WITH PROJECT PLANNING

CLIP 1 – YOUR BALANCING ACT

1. No doubt about it, doing both project leadership and planning, along with your technical contributions, is a balancing act. And it will be challenging.

2. This module will provide a roadmap with ideas, methods, and processes to help you successfully balance your new work life as a project manager or leader.

3. Essential technical skills you must have:

- a. Deep domain knowledge.
- b. Coding and design proficiency.
- c. Software dev. methodologies.
- d. Technical planning.
- e. Technical risk assessment.

4. Essential interpersonal skills you must have:

- a. Leadership and mentorship.
- b. Communication.
- c. Decision-making.
- d. Stakeholder management.

- e. Problem-solving.
- f. Organizational and time mgmt.

CLIP 2 – PRIORITIZE AND STRATEGIZE

I. Meet with who assigned you to the project:

- a. Find out why you were selected.
- b. Ask about your new team or build a new one.
- c. Ask what your manager expects of you.
- d. Find out who the stakeholders are.
- e. Discover what the priorities and goals are.
- f. Is there a schedule? Budget?
- g. Is there project control/change management?
- h. What are the communication practices?

2. Meet with your teammates/team members:

- a. First, meet and get to know the team.
- b. Introduce yourself to your new team.
- c. Ask the team how to improve the project.
- d. Set up weekly team meetings.
- e. Set up one-on-one meetings with each person.
- f. Build up your initial action plan.
- g. Provide your feedback and draft action plan.
- h. Continuously improve your team action plan.
- i. Show you listen and care about their welfare.
- j. What are the communication practices?

CLIP 3 – DEVELOP YOUR ACTION PLANS FOR SUCCESS

I. Meet your stakeholders and create an action plan:

- a. Identify and meet with all potential stakeholders before you start your project assignment. Stakeholders can come and go so keep the list active.
- b. Classify their role or roles in the context of your project. In an earlier module we talked about those attributes, such as what's their Involvement, what Influence do they have, what are their

viewpoints and expectations, are they internal to your organization, or are they external to your organization. This helps you build up an objective view of your stakeholders.

- c. Feel free to modify my action plan template to fit your needs.
- d. This information will give you a solid understanding and grasp on how best to lead and communicate with your stakeholders.
- e. This is a partial list, so add more if you need to.

2. Establish your communication activities:

- a. Set up briefings with your manager.
- b. Set up developer team meetings.
- c. Set up one-to-one team member meetings.
- d. Set up briefings with stakeholders.
- e. Set up business-oriented presentations.
- f. Set up briefings with finance.
- g. This is a partial list, so add more if you need to.

3. Review and improve team activities:

- a. Review, validate and/or enhance:
 - i. Dev tools, processes and methods.
 - ii. Requirements management process.
 - iii. Change management process.
 - iv. Project control standards and process.
 - v. Sprint, Kanban boards quality and usage.
- b. Review the team's active work:
 - i. Backlog.
 - ii. Work in progress.
 - iii. Builds, releases.
 - iv. Any other important activity, process, or event.

CLIP 4 – THE POWER OF DELEGATION

I. It's time to "let go" of some of your technical responsibilities:

- a. For you to transition from a software engineer to take on additional project leadership activities, it is time to let go of some of those technical activities that you have done so well for so long.
- b. Leaders are about growing others.
- c. Grow your team by letting go.
- d. This can only be accomplished successfully with delegation.

2. Definition: delegation:

- a. It is the process of distributing and entrusting work to another person.

3. Why delegation is important:

- a. You can't succeed without it.
- b. Builds trust.
- c. Careless delegation destroys trust and morale.
- d. Develops a deeper sense of responsibility.
- e. Instills motivation: feeling trusted/challenged.

4. How to delegate effectively:

- a. Determine the work to delegate.
- b. Provide clear instructions.
- c. Empower your team.
- d. Don't micromanage.
- e. Keep the tasks broader.
- f. Spend more time overseeing tasks.
- g. You need to delegate, not dump.

5. A great quote:

- a. "If you are not clear with the expected outcomes, your delegation will fail; not because of them, but because of you." – Michael Krasowski.

CLIP 5 – LEVERAGING TEAM COLLABORATION

I. Definition: collaboration:

- a. Collaboration refers to the process where team members work together, sharing knowledge, skills, and responsibilities, to achieve a common goal.
- b. Collaboration is IMPLEMENTED with people, process, methods, and tools.

- c. You need to build the environment so that collaboration grows and thrives.

2. Why the Emphasis on Collaboration?

- a. Improves team morale.
- b. Increases efficiency.
- c. Furthers software output quality.
- d. Supports enhanced problem solving.
- e. Reduces risks, such as bugs, missed schedules.
- f. Loners can be a disservice to the broader team. A loner can affect morale and productivity negatively. Coach and manage loners to be team players.

3. Maximize collaboration with the right choice of tools and practices:

Collaboration Activities	Tools and Practices that Support Collaboration
General team communication	Slack, MS/Teams, others
Project management	Jira, Trello, others
Daily, weekly planning	Kanban, Scrum, others
Requirements management	Jira, Confluence, others
Development collaboration	Reviews, walkthroughs, testing, etc.
Team building, training	Focused meetings, Pluralsight, etc.
Version control and builds	GitHub, Bitbucket, Azure, others

- a. Table mapping tools and practices to activities.

CLIP 6 – HOW TO LEVERAGE TECHNOLOGY

I. Boosting developer productivity – first a plan:

- a. Review your current development environments.
- b. Provide a visual representation for discussion.
- c. Discuss pros/cons and areas of improvement with your team.
- d. Produce an action plan to boost productivity. Produce a list of improvements that the team would like to see. Be open-minded at this point. Prioritize and then based on funding or other constraints, reduce the list.
- e. Seek approval/funding and implement.

- f. You are displaying leadership: a morale booster!
- g. New technology can be disruptive – be mindful not to make matters worse.

2. Boosting developer productivity – development environment(s). Here are some ideas of things to look at. Technology is always changing so this list will age with time:

- a. Use integrated development env. (IDEs).
- b. Use version control systems (VCS).
- c. Use containerization.
- d. Use continuous integration/delivery (CI/CD).
- e. Use automated testing tools.
- f. Use cloud development environments.
- g. Use AI-powered assistants.

3. Boosting project productivity – internal operations:

- a. Streamline project mgt. and collaboration.
- b. Streamline documentation.
- c. Streamline communication and collaboration.
- d. Use Agile, Sprint, and Kanban methodologies.
- e. Use data analytics and reporting.
- f. Use metrics and KPIs (key performance indicators).

4. Enhancing customer experience and service:

- a. Use customer management systems.
- b. Use customer communication platforms.
- c. Use help desk software.
- d. Use chatbots and AI agents.
- e. Use proactive messaging tools.
- f. Use customer success platforms.
- g. Use feedback and survey platforms.

5. An approach to leveraging new technologies:

- a. Start small and iterate.

- b. Begin with your most pressing needs.
- c. Prioritize for efficiency/customer experience.
- d. Ensure they support clear goals and value.
- e. Emphasize continuous learning/adaptation.
- f. “Choose wisely.”
- g. Have a plan, revisit regularly.

CLIP 7 – FOSTER CONTINUOUS IMPROVEMENT

1. A mindful quote:

- a. “Continuous improvement isn’t something that you just bolt on to your job functions, it is intrinsic to everything you and your team should be doing in your daily work.”
– Michael Krasowski.
- b. Everyone should think and reflect about what they do and say daily, even for just 30 seconds a day.
Am I improving something? AM I moving forward? Am I making a difference?

2. Fostering CI through delegation

- a. Empowers team members.
- b. Better efficiency with workload distribution.
- c. Assigning tasks to enable growth goals.
- d. Allows leaders to focus on leadership activities.
- e. Delegation ensures growth and adaptability.

3. Fostering CI through collaboration

- a. Stakeholder reviews.
- b. Code reviews/pair programming.
- c. Sprint reviews and retrospection.
- d. Kanban and Sprint planning.
- e. Automated testing.

4. Your balancing act – made easier

- a. Instill a collaboration culture within your team.
- b. Have a strong collaboration with stakeholders.
- c. Implement proactive delegation, building trust.

- d. Continuous improvement, yields great results!