The Importance of Knowing Your Role on a Web/Mobile Development Project

Team-based web and mobile development is challenging. Everyone brings his or her own personal experiences to how software should be built and how projects should be managed. Throw in company-specific processes, different organizational makeups, and a variety of industry methodologies, and software development can get pretty confusing.

It's not uncommon for teams to take elements from different methodologies (Scrum, TDD, Waterfall, Lean, Kanban, etc.) to build software. When software projects struggle or fail, many blame the methodology or the unorthodox mixing of multiple methodologies. This can be a factor, but the source of issues is more often directly related to critical roles being missed or misunderstood. Software project success is tied to how well the project team works together, so roles need to be clearly defined and followed throughout the project.

The right processes will vary depending on the structure of the organization. At the end of the day, what matters is that you build software that is of high value to your users. At AIM Consulting, we understand all the methodologies and adapt an approach that meets the needs of the business. We make sure all the necessary roles are understood and covered, key responsibilities are not overlooked and team members are not spreading themselves too thin. The result is contributing teams, quality software, and project success.

PROJECT MANAGER

The role of a project manager is to keep the budget, schedule and scope of the project on track and communicated to all stakeholders

Project managers collect status and communicate it with the entire team and external stakeholders. They organize and drive meetings with external stakeholders to ensure dependencies are understood. They ensure the team is hitting their goals and remain on track for project delivery. If anything arises that will impact the budget, schedule or scope, the project manager will work with the team and external stakeholders to ensure the proper adjustments are made (request more budget, schedule slide, decrease scope, work weekends, etc.).

SCRUM MASTER

In Scrum methodology, the person who coordinates and facilitates the daily activities of the team is called the scrum master. On many software projects, the project manager performs this role, but though one person may be used for both roles, the role of scrum master is distinctly different from the role of the project manager. By separating the two, there is be a better, unbiased perspective of truly how well a project is doing. This is because the project manager has to deal with external pressures placed on the team, which can impact how the person in this role interacts with the team. By having a role dedicated to the daily interactions of the team, the project manager can focus his/her role of managing the overall project.

On a daily basis, the scrum master ensures the team is working on the correct tasks and has everything they need to complete their work. This includes connecting different resources to talk to each other to solve an issue, bringing the product owner into a meeting to get their opinion, contacting facilities to get a new monitor for a developer, etc. The list goes on, but the key is that they ensure the team is producing.

The scrum master role is tightly coupled with the project manager role to ensure accurate project health and status is known and communicated. The internal team vs. external team emphasis described here is truly the benefit of separating the responsibilities normally assigned to a project manager.

PRODUCT OWNER

The product owner (sometimes the product manager depending on the structure of the organization) owns the vision and requirements for the project, thus controlling what the team works on. Nothing is worked on unless it is approved or provided by the product owner. The product owner protects the project team from external stakeholders that want their requirements implemented. In turn, the product owner works with the external stakeholders to consolidate or compromise on requirements to make the determination on which ones make it into the product.

The product owner is responsible for documenting requirements and their priority. This allows the team to know what is being asked of them and what items to work on first. They provide support to the team by answering questions and providing information to help the team move forward.

ANALYST

Much like the project manager role, the analyst role varies wildly depending on the needs of the organization. At the end of the day, the analyst serves as the conduit between the product owner and the dev / QA teams. This can include helping the product owner write requirements to creating specs for the dev / QA teams to work from. The analyst helps the team understand what the product owner is asking for.

Conversely, the analyst can help the product owner understand limitations, such as why certain requirements will cost too much to do versus an alternative.

DEV LEAD

The dev lead is in charge of the dev team and provides direction on the architecture of the project, coding standards and what tasks each developer works on. The dev lead establishes the development processes for the entire team, from development tools to peer code reviews to how and when code can be checked in. The dev lead needs to coordinate with the scrum master to ensure the team is on the right track. The larger the team, the tighter the coordination needs to be.

QA LEAD

The QA lead is in charge of the QA team and provides direction on the activities related to testing the product. The QA lead establishes the processes for the entire team, from testing approach (automated vs. manual, etc.), tools to use, or devices / operating systems to focus on. The QA lead needs to coordinate with the scrum master to ensure the team is working on the correct items. The larger the team, the tighter the coordination needs to be.

DESIGN LEAD

The design lead is in charge of the design team and provides direction and vision for the look and feel of the product. The design lead should be in lock step with the product owner when the requirements are created. The design lead needs to coordinate with the scrum master to ensure the team is working on the correct items. The more design artifacts for a project, the tighter the coordination needs to be.

DEV TEAM

The dev team is the group of people responsible for developing the product. They get their direction from the dev lead on what tasks to work on and how they should be done. They interact and coordinate with all other team members, but their direction should ultimately come from the dev lead.

QA TEAM

The QA team is the group of people responsible for testing the product. They get their direction from the QA lead on what tasks to work on and how they should be done. They interact and coordinate with all other team members, but their direction should ultimately come from the QA lead.

DESIGN TEAM

The design team is the group of people responsible for providing design direction and design artifacts to the dev team to put into the product. They get their direction from the design lead on what tasks to work on and how they should be done. They commonly interact with the dev lead to ensure designs are followed. They interact and coordinate with all other team members, but their direction should ultimately come from the design lead.

3RD PARTY TEAM

Rarely are projects self-contained, meaning there are no 3rd party dependencies. Whether it's source data, enterprise architecture, an SDK or internal API, or a team that manages the release of the product, a project team will need to work with people outside of their immediate team. The role of the 3rd Party Team is to provide the tools that the team needs and whatever documentation or support is necessary to correctly build and implement the product. The key for the software team is the communication between them and the 3rd party. This falls into the role description of both the project manager and the scrum master. It is the project manager's role to ensure the two teams are aligned and it is the scrum master's role to ensure that the project team has everything they need to do their work.

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PROJECT MANAGER

ROLE
Keeps track of the budget, schedule and scope of the project and communicates status to all stakeholders.

TASKS
- Works with stakeholders to define budget, schedule and scope of the project
- Ensures the team is working toward its goals and remains on track for project delivery
- Collects status and communicates it with the entire team and stakeholders
- Organizes and drives meetings with the team and third parties to ensure all dependencies are understood and met
- Mitigates issues that will impact the budget, schedule or scope of the project

IMPORTANT NOTES
Sometimes the person fulfilling the role of project manager also takes on the role of the scrum master.

SCRUM MASTER

ROLE
Ensures the project team is working on the correct tasks and has everything needed to complete their work.

TASKS
- Interacts daily with the project team to ensure progress is made
- Ensures that the team's established software development processes are followed
- Ensures each team member is assigned tasks
- Removes blocking issues so team members can accomplish their tasks
- Coordinates with the product owner to ensure requirements are available and prioritized
- Coordinates with the project manager to ensure the team's progress is accurately communicated

IMPORTANT NOTES
Oftentimes the same person in the project manager role performs the role of scrum master. The key is to ensure the responsibilities for each role are distinct and understood.

3RD PARTY TEAM

ROLE
Provides source data, enterprise architecture constraints, architecture, SDK, internal API, release management, etc.

DEV LEAD

ROLE
Leads and provides direction to the dev team.

TASKS
- Provides direction on the architecture of the project (or works with the architecture team), coding standards and what tasks each developer works on.
- Establishes the development processes for the entire team.
- Coordinates with the scrum master to ensure the team is on the right track.

DEV TEAM

ROLE
Develops the product according to desired specifications.

TASKS
- Implement requirements and change requests
- Fix defects
- Coordinate with the product owner, analyst or design team for clarification on requirements

DESIGN LEAD

ROLE
Leads and provides direction to the design team.

TASKS
- Provides design direction and vision for the project
- Coordinates with the scrum master to ensure the team is working on the correct items

DESIGN TEAM

ROLE
Provides visual design assets for the product.

TASKS
- Creates visuals (wireframes, animation studies, color palettes, etc.) that can be used to apply the proper design for the product
- Creates assets that will be used within the product
- Provides support to the dev / QA teams to ensure designs are followed

IMPORTANT NOTES
The emphasis placed on design varies depending on the organization. The design lead may be the entire design team.

PRODUCT OWNER

ROLE
Owns the vision and requirements for the project, thus controlling what the team works on.

TASKS
- Works with external stakeholders to define overall project requirements
- Documents requirements and their priorities
- Communicates with the scrum master on the list of requirements and their priorities
- Clarifies requirement questions and expectations

IMPORTANT NOTES
Product owner is a term from Scrum methodology. The product owner protects the project team from external stakeholders, as the project team doesn't need to be involved in the churn of the product backlog. Sometimes a product manager assumes this role.

ANALYST

ROLE
Serves as the conduit between the product owner and the project team so that everyone understands each other.

TASKS
- Works with the product owner to define requirements within the product's environment, budget and scope
- Documents business and system requirements
- Translates technical issues for product owner and external stakeholders
- Provides clarification on requirements for the project team

IMPORTANT NOTES
- Some organizations may not have analysts. Other organizations may have analysts that are focused only on the technical functionality of the project.
- If there is not an analyst on the team, the tasks listed still need to be accomplished.
- The analyst can sometimes fill the role of the scrum master or product owner.

QA LEAD

ROLE
Leads and provides direction to the QA team.

TASKS
- Provides direction on the activities of the team.
- Establishes the testing processes for the entire team
- Coordinates with the scrum master to ensure the team is working on the correct items
- Coordinates with the product owner, analyst or design team to determine deviation from requirements or as-designed features

QA TEAM

ROLE
Tests the product to ensure quality specifications are met.

TASKS
- Creates test cases
- Tests the product (manual or automated)
- Logs defects

Diagram labels
STAKEHOLDERS
PRODUCT OWNER
PROJECT MANAGER
ANALYST
SCRUM MASTER
3RD PARTY TEAM
DEV LEAD
DEV TEAM
QA LEAD
QA TEAM
DESIGN LEAD
DESIGN TEAM