

Software Engineering: Working As A Team

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Software Engineering Teams

- Nearly all software these days is written by teams of 4-6 software developers.
- Teams usually work best with a small number of people.
- A small team of people avoids the "herd" mentality of large teams.
- In a large team people tend to go along with popular opinion rather than thinking for themselves.

Software Engineering Teams

- Teams must make a strong commitment to a common purpose and goals.
- The members of the team must also share a sense of mutual accountability.
- They must hold themselves and each other answerable for meeting the team's goals.

Software Engineering Teams

Some of the reasons for organizing a group of people as a team:

- A team working together usually gets more results in less time than other types of organizations.
- Teams allow each member to have an equal say in decisions and discussions.
- By considering all ideas and proposals equally, teams can produce more creative and optimum results.
- People on teams generally derive more satisfaction from their jobs.

Defining Roles and Responsibilities

- Understanding the mission begins with understanding the product the team will produce.
- Define the roles of each team member according to their interests and skills.
- Each team member will have the responsibility for the design and implementation of a sub-section of the product.

Responsibilities Common to all Team Members

- Follow through on commitments.
- Lack of follow-through impedes the performance of others and reduces trust.
- Team members will interpret lack of follow-through as a lack of respect for others.

Responsibilities Common to all Team Members

- A team member has a responsibility to speak frankly and openly when there is a difference of opinion.
- Members should show flexibility, an ability to meet halfway.
- Team members should negotiate their differences so that both parties can win.

Responsibilities Common to all Team Members

- Team members must be willing to say what they think, ask for help, share new or unpopular ideas, give the status of their activities, and risk admitting mistakes.
- When communication is friendly, open and positive, teams are more productive, and team members feel more satisfied.

Responsibilities Common to all Team Members

- Do things on time.
- Show up on time for meetings.
- Return emails and texts as promised.
- Share important information promptly and succinctly.

The Team Leader

Why does a team need a leader?

- Someone needs to look at the big picture: the project as a whole.
- This allows the other team members to focus on their parts of the project knowing that someone is thinking about how everything fits together.
- The team may choose one person as the team leader.
- The team may decide to rotate leadership during the project.

The Team Leader

- Team leaders are not like "traditional" bosses.
- The team does not work for the team leader; the team leader works for the team.

The Team Leader

Some main responsibilities of the Team Leader

- Monitor actual performance of the team in meeting its goals.
- When necessary, the team leader must force the team to make decisions and change strategies to ensure their success.
- Every team member must do roughly equal amounts of work and that includes the team leader.
- Often times the leader must set an example by volunteering to do jobs that no one else wants to do.