



Research project  
management

# What is a project

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- A project is a temporary endeavor to create a unique product, service, or result.
- The key characteristics of a project are:
  - A project has a defined beginning and end.
  - The purpose of the project is to create a unique output: a product, service, or a result. (tangible or intangible).
- Example of project: conducting a research effort where the outcomes will be recorded.

# Research project

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- Purpose:
  - Investigate a particular concept
- Outputs:
  - Publish research results
  - Train highly qualified personnel
  - Development of a technology
- Resources
  - People
  - Equipment
  - Facilities
  - Materials

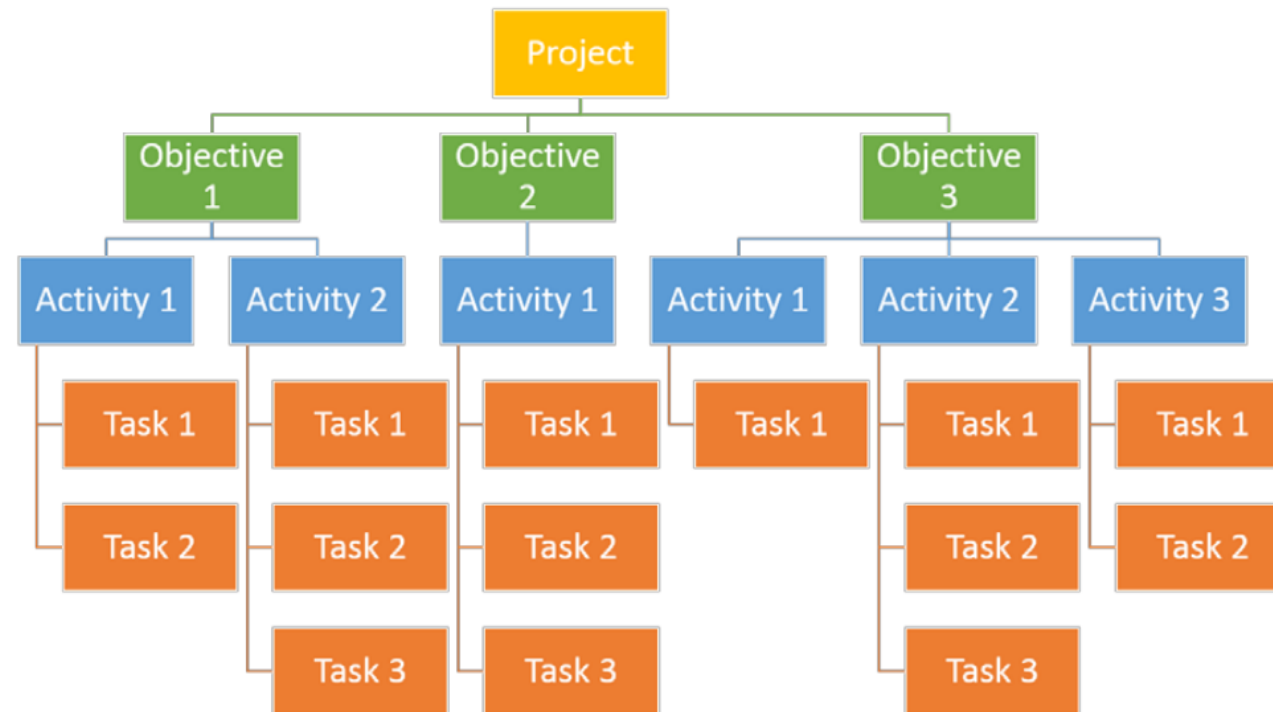
# Constraints of a project & planning

- Scope
  - overall purpose
  - = objectives + activities + tasks
- Schedule
  - due to temporary nature of project
  - a defined timeframe
- Budget
  - associated cost
  - according to the resource usage

- Project planning



# Work breakdown structure



# Gantt Chart Example

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7
Activity 1	█	█					
Activity 2	█	█	█				
Activity 3			█	█			
Activity 4					█		
Activity 5				█	█		
Activity 6		█	█	█	█		
Activity 7						█	█

# Responsibility assignment matrix (RACI)

	Principal Investigator	Research Assistant	Graduate Student
Activity 1	A,C	R	I
Activity 2	A,C	R	I
Activity 3	A,C	R,C	R
Activity 4	A,R	C	I

R- responsible, A-accountable, C-consult, I-inform

# Proposal writing

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- Objectives
- State-of-the-art assessment
- Positioning
- Work breakdown
- Milestones + timeline
- Deliverables
- High level process map
- Gantt chart
- Data management plan
- Budget
- Risk assessment + mitigation plan



# Research data management

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- Outlines how the data will be handled during the research, and after the project has been completed
- Incorporate:
  - Data storage and backup
  - Data documentation and file structure/organization •
  - Data sharing and access

# Implementation

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## To do

- Work breakdown in manageable components
- Work monitoring
- Issue management
- Communication
- Project charter
- Control of the budget

## Use project management software

- [Basecamp](#)
- [Trello](#)
- [OpenProject](#)