HUDK 5053: FEATURE ENGINEERING STUDIO

9/12/19 4:15 PM

Exercise

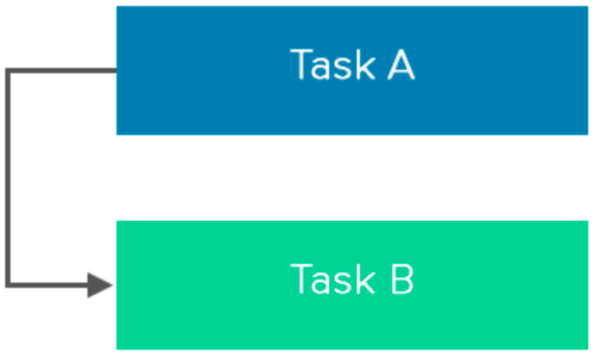
- In pairs choose a problem to tackle
- Work through Project Management steps 1-5

Project Management

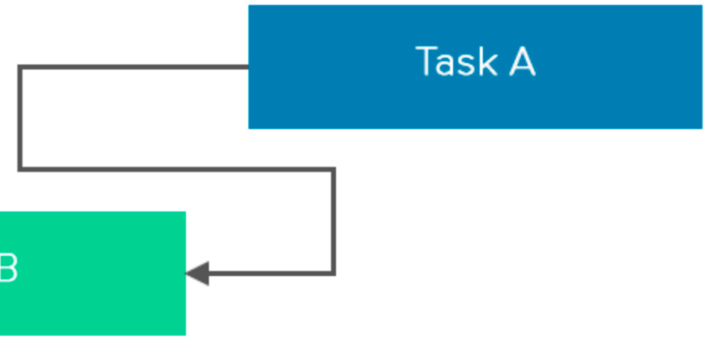
1. **Agree on the success criteria and major constraints**
2. **List tasks**
3. **Estimate times and costs for each task**
4. **Assess dependencies and draw critical path - how long will project take**
5. **Consider crashing, overlapping tasks or bottlenecks (including people)**
6. **Draw Gantt chart**
7. **Calculate resource requirements over time (adjust using non-critical tasks)**
8. **Assess risks and prepare contingency plans**

Critical Path Dependencies

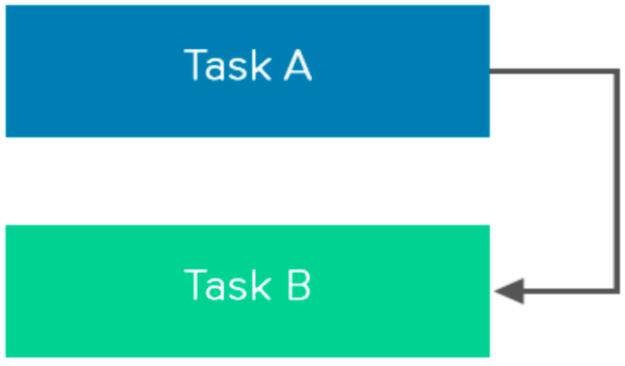
What are the dependencies between these tasks?



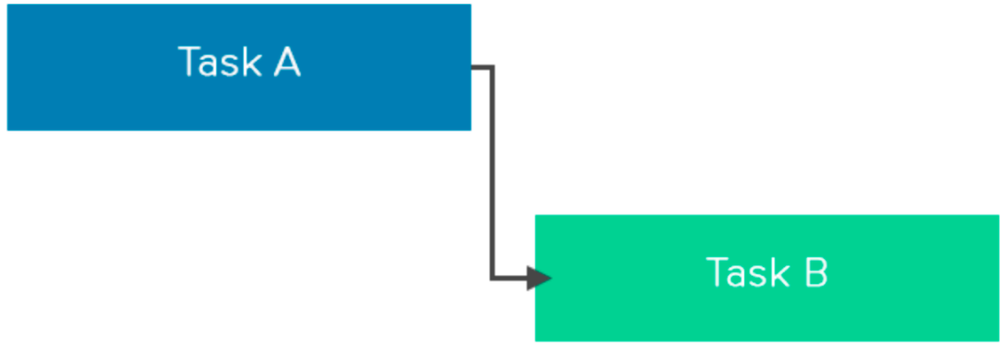
Start-to-Start



Start-to-Finish



Finish-to-Finish



Finish-to-Start

Gantt Charts

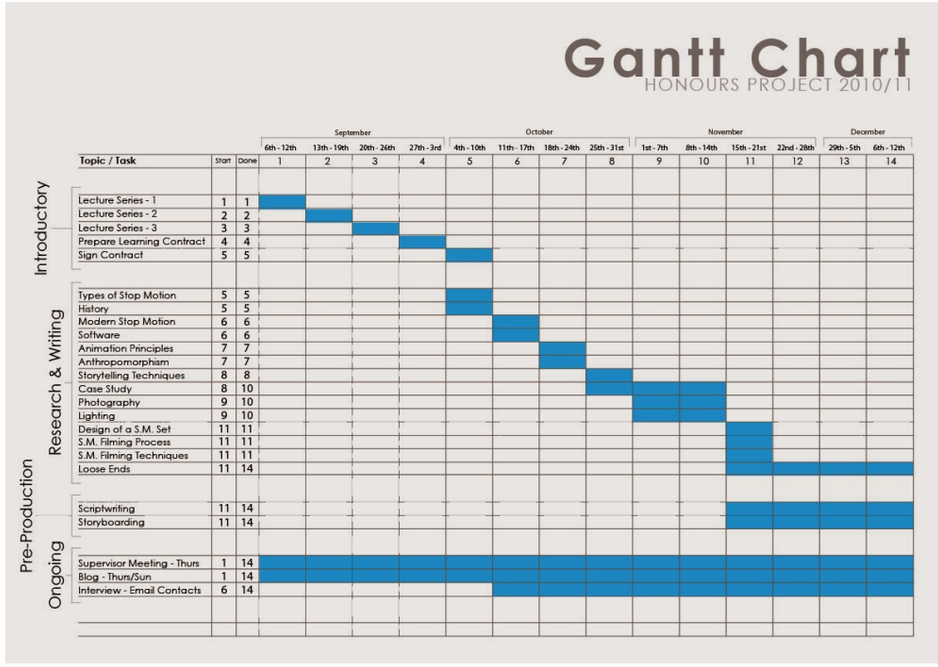
Activity/Day	1	2	3	4	5	6	7	8	9	10	11	12	13
Cut fur	■	■											
Stuff and sew fur			■	■	■	■	■	■					
Cut material	■	■											
Sew clothes			■	■									
Embroider T-shirt					■	■							
Cut accessories	■												
Sew accessories		■	■										
Dress bears									■	■	■		
Package bears												■	
Ship bears													■

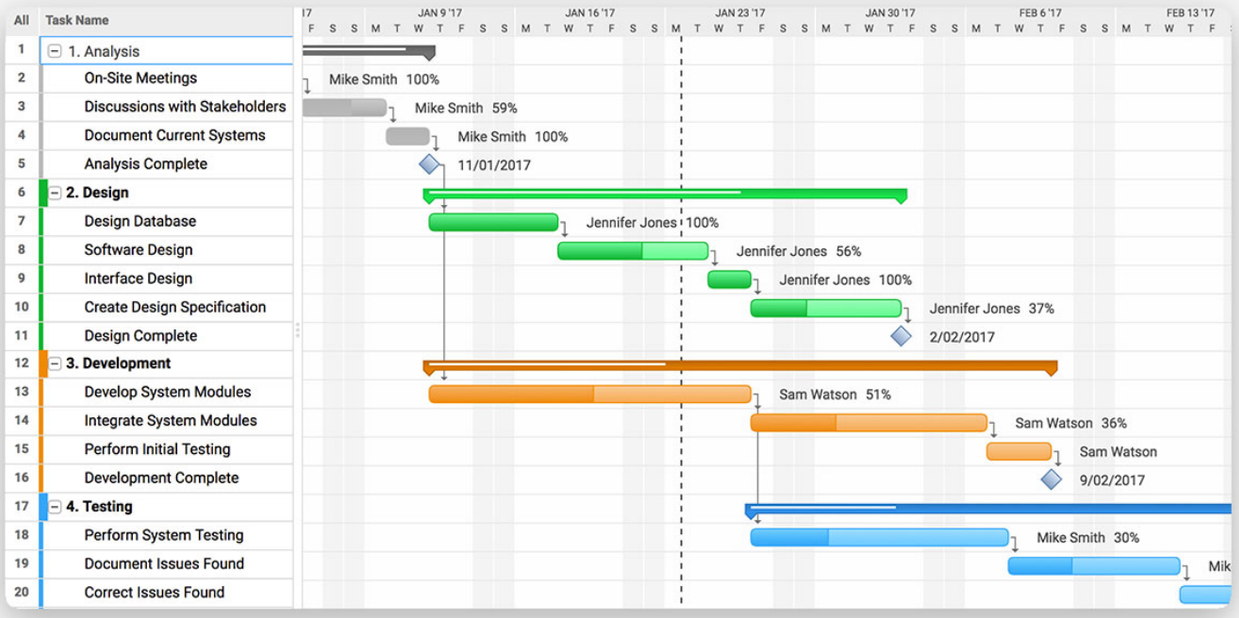
Lot size: 100 bears

All activities are scheduled to begin at their earliest start time.

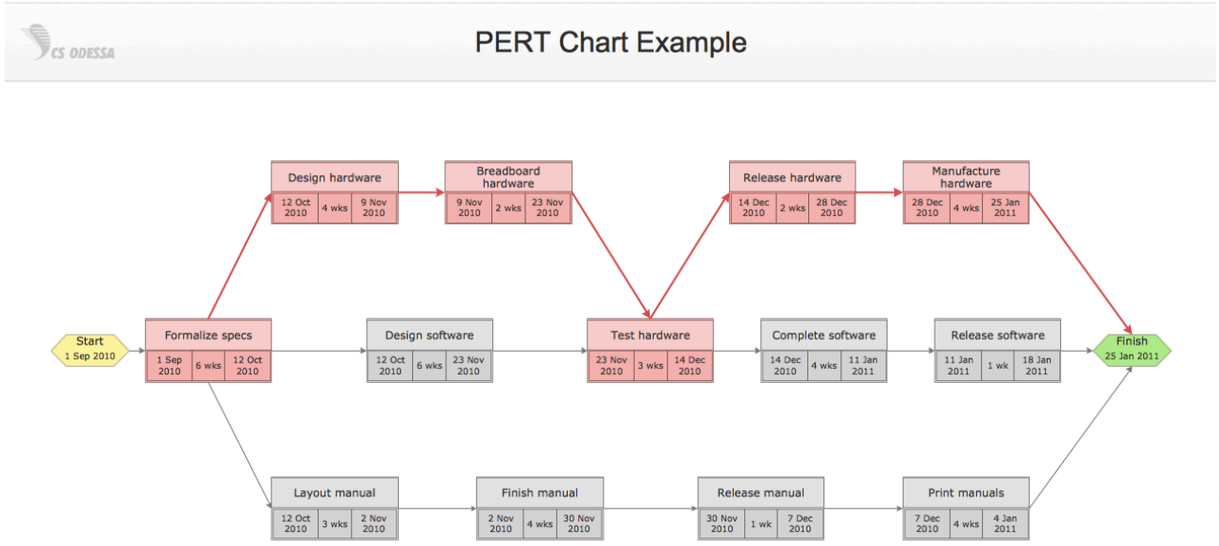
■ Completed work

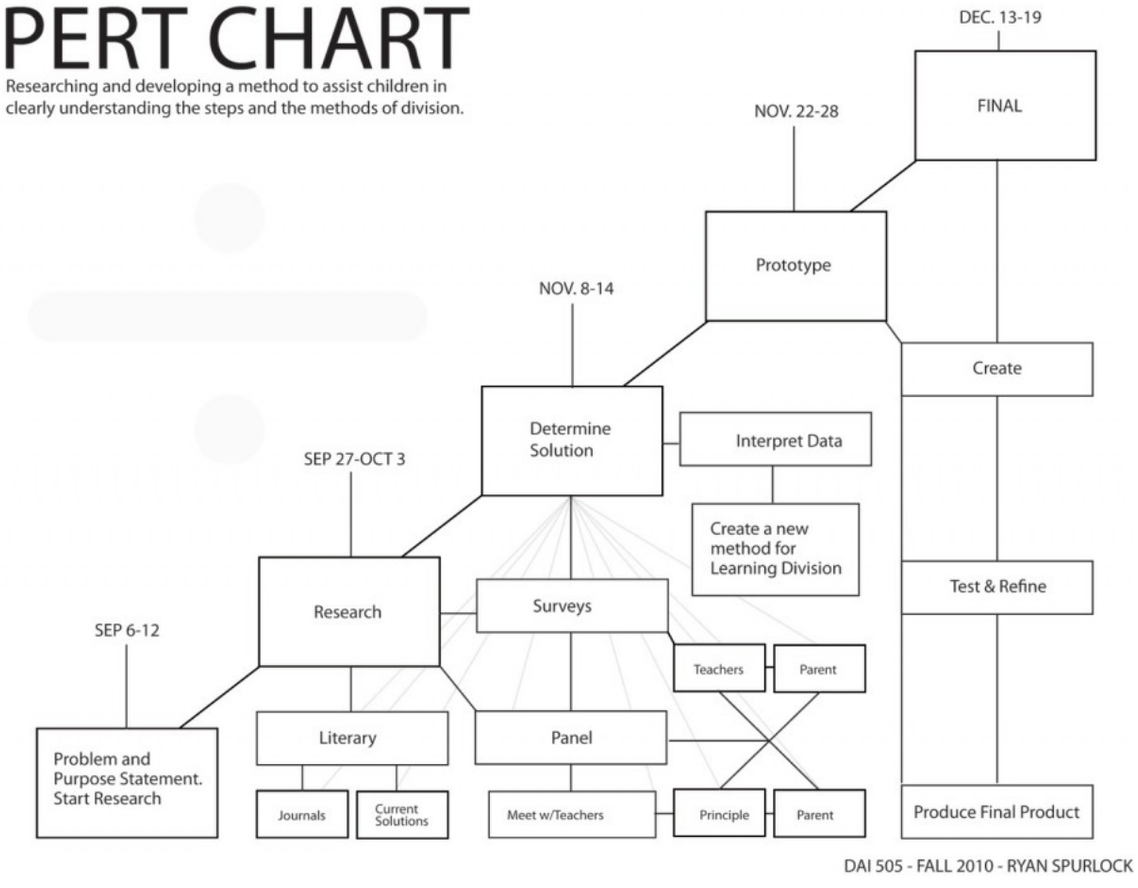
■ Work to be completed





Gantt Charts





Gantt Charts in R

1. Create a Google Sheet with the following headers: event, group, start, end, color
2. Map your project onto dates in the Google Sheet
3. Color code code by groups or events (https://www.color-hex.com/)
4. Install and load `"vistime"` in R
5. Create a Project in RStudio
6. Download your Goodle Sheet as a .csv and put it in the project folder

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```
library(shiny)
library(plotly)
library(vistime)

data <- read.csv("YOURGOOGLESHEET.csv", header = TRUE)

shinyApp(
  ui = plotlyOutput("myVistime"),
  server = function(input, output) {
    output$myVistime <- renderPlotly({
      p <- vistime(data, events="event", groups="group")
      pp <- plotly_build(p)
      pp
    })
  }
)
```

Groups

Placement	Students
CitiBank	Aidi, Yawei
Avenues School	Taha, Irene
Literably	Juye, Guo

Memoranda of Understanding

- Less formal than a contract (legally binding)
- Non-combative terms
- More formal than a handshake
- Mutually beneficial framework
- MOUs are beneficial not because they are enforceable, but because of the time/effort that both parties have to put into it

Memoranda of Understanding

- Brainstorm common objectives, what do you want? What do you offer?
- Deliverables
- Communication (Contact details, timing)
- Dates and expectations for performance reviews
- Dispute resolution
- When agreement begins/ends
- "This memorandum is not intended to and does not create any contractual rights between these parties."

https://www.youtube.com/watch?v=TsRBftzZsQo