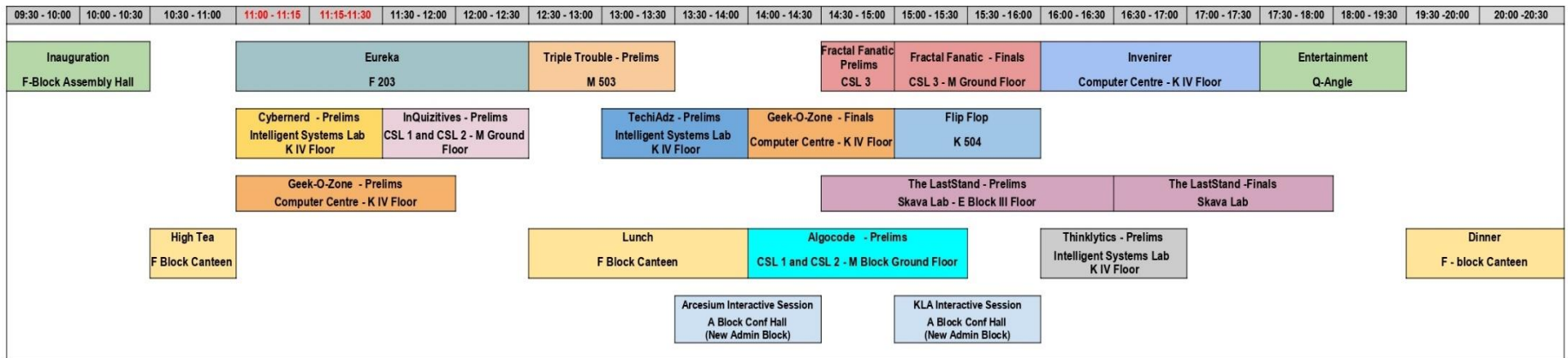# The Purpose of a Gantt Chart:

- To illustrate the relationship between project activities & time.

- To show the multiple project activities on one chart

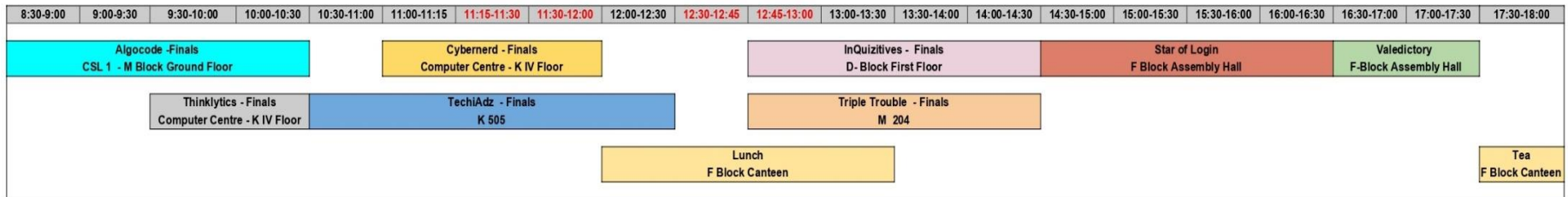- To provide a simple, easy to understand representation of project scheduling

Example of a Gantt Chart:

LOGIN 2019 - Schedule

Day 1   28/09/2019

Time slots: 09:30 - 10:00 | 10:00 - 10:30 | 10:30 - 11:00 | 11:00 - 11:15 | 11:15-11:30 | 11:30 - 12:00 | 12:00 - 12:30 | 12:30 - 13:00 | 13:00 - 13:30 | 13:30 - 14:00 | 14:00 - 14:30 | 14:30 - 15:00 | 15:00 - 15:30 | 15:30 - 16:00 | 16:00 - 16:30 | 16:30 - 17:00 | 17:00 - 17:30 | 17:30 - 18:00 | 18:00 - 19:30 | 19:30 -20:00 | 20:00 -20:30

- Inauguration — F-Block Assembly Hall
- Eureka — F 203
- Triple Trouble - Prelims — M 503
- Fractal Fanatic Prelims — CSL 3
- Fractal Fanatic - Finals — CSL 3 - M Ground Floor
- Invenirer — Computer Centre - K IV Floor
- Entertainment — Q-Angle
- Cybernerd - Prelims — Intelligent Systems Lab K IV Floor
- InQuizitives - Prelims — CSL 1 and CSL 2 - M Ground Floor
- TechiAdz - Prelims — Intelligent Systems Lab K IV Floor
- Geek-O-Zone - Finals — Computer Centre - K IV Floor
- Flip Flop — K 504
- Geek-O-Zone - Prelims — Computer Centre - K IV Floor
- The LastStand - Prelims — Skava Lab - E Block III Floor
- The LastStand -Finals — Skava Lab
- High Tea — F Block Canteen
- Lunch — F Block Canteen
- Algocode   - Prelims — CSL 1 and CSL 2 - M Block Ground Floor
- Thinklytics - Prelims — Intelligent Systems Lab K IV Floor
- Dinner — F - block Canteen
- Arcesium Interactive Session — A Block Conf Hall (New Admin Block)
- KLA Interactive Session — A Block Conf Hall (New Admin Block)

Day 2   29/09/2019

Time slots: 8:30-9:00 | 9:00-9:30 | 9:30-10:00 | 10:00-10:30 | 10:30-11:00 | 11:00-11:15 | 11:15-11:30 | 11:30-12:00 | 12:00-12:30 | 12:30-12:45 | 12:45-13:00 | 13:00-13:30 | 13:30-14:00 | 14:00-14:30 | 14:30-15:00 | 15:00-15:30 | 15:30-16:00 | 16:00-16:30 | 16:30-17:00 | 17:00-17:30 | 17:30-18:00

- Algocode -Finals — CSL 1 - M Block Ground Floor
- Cybernerd - Finals — Computer Centre - K IV Floor
- InQuizitives - Finals — D- Block First Floor
- Star of Login — F Block Assembly Hall
- Valedictory — F-Block Assembly Hall
- Thinklytics - Finals — Computer Centre - K IV Floor
- TechiAdz - Finals — K 505
- Triple Trouble - Finals — M 204
- Lunch — F Block Canteen
- Tea — F Block Canteen

Creating a Gantt Chart:

There are two methods to creating a Gantt Chart:

- Using a **Forward Schedule**: starting with the list of activities and a given start date

- Using a **Backward Schedule**: look at the deadline, from that date work in the logical list of activities.

Steps to Creating a Gantt Chart:

- Determine Project start date and deadline.

- Gather all information surrounding the list of activities within a project

- Determine how long each activity will take

- Evaluate what activities are dependant on others

- Create Graph shell including the timeline and list of activities.

- Using either **Forward Scheduling** or **Backward Scheduling**,

Example:

Consider the following:

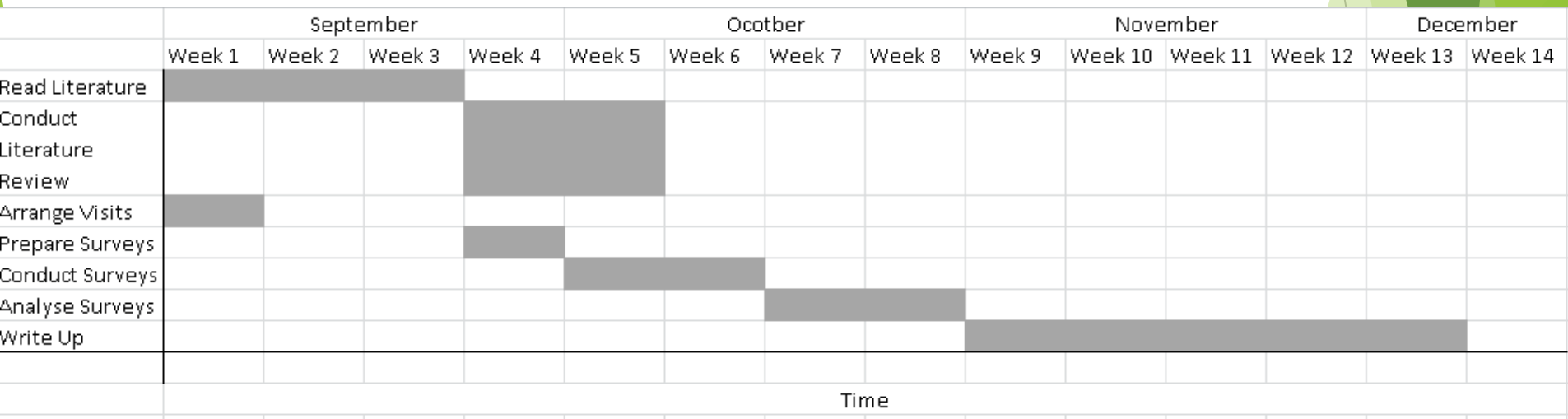| Activity	Duration	Dependant On
1. Read Literature	21 days	N/A
2. Conduct Literature Review	14 days	1
3. Arrange Client Visits	7 days	N/A
4. Prepare Surveys	5 days	1 and 3
5. Conduct Surveys	14 days	4
6. Analyse Surveys	10 days	5
7. Write Up	30 days	1,2,3,4,5 and 6

Project Start Date = 1st September
Deadline = 20th Decemeber

- Step 5 - From the previous slide, steps 1-4 are already complete. We now need to create a 'Graph Shell'.

Activities	Read Literature								
	Conduct Literature Review								
	Arrange Visits								
	Prepare Surveys								
	Conduct Surveys								
	Analyse Surveys								
	Write Up								
					Time				
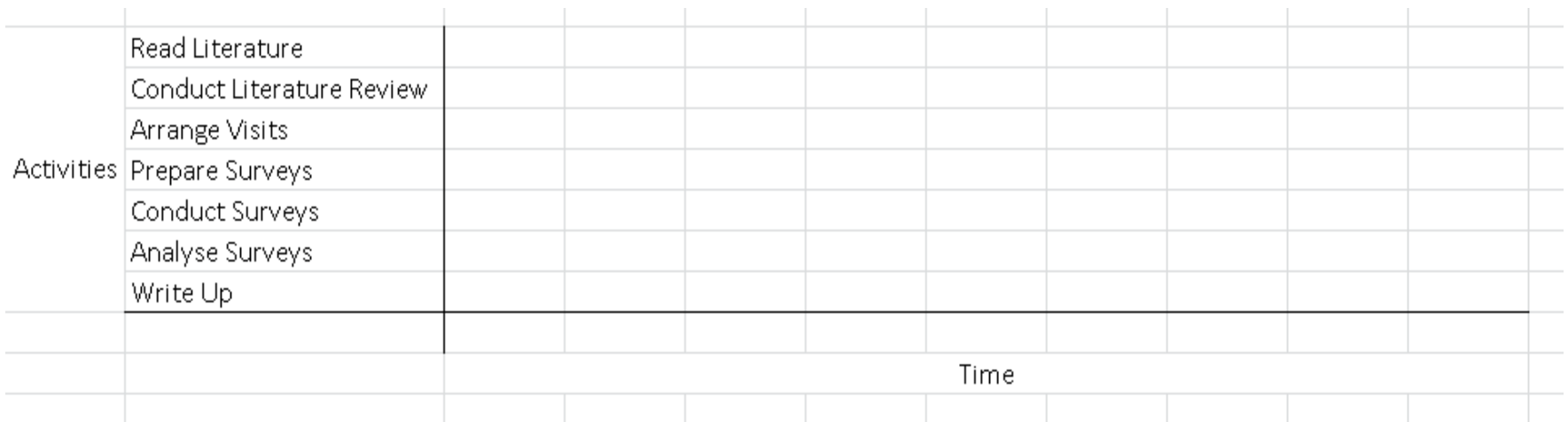
- Step 6 – have a go at using either **Forward Scheduling** or **Backward Scheduling** to populate the graph.

The Finished Product:

	September				Ocotber				November				December	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Read Literature	███	███	███											
Conduct Literature Review				███	███									
Arrange Visits	███													
Prepare Surveys				███										
Conduct Surveys					███	███								
Analyse Surveys							███	███						
Write Up									███	███	███	███	███	

Time

The Advantages:

- A useful tool for displaying time-based information within a project.
- Very simple to create
- They provide a useful overview of project activities, a good starting point for project planning.
- The charts are widely used and understood.
- There exists several PC software packages that allow you to build Gantt Charts.

The Limitations:

- The Gantt Chart does not explain the reasoning behind the chosen duration of each activity.

- The Gantt Chart is very difficult to update when changes to the project plan take place.

The Limitations:

- Gantt Charts encourage a one-step approach to planning – this prevents flexibility in project planning.

- As Gantt Charts are difficult to update manually, they can often become obsolete.

- The charts do not consider project costs or resources.

Alternatives

- PERT/GERT

- Work Breakdown Structure

- Critical Path Method

- Resource Levelling

- Many Others!