# Work Plan and Resource Requirements (Sample Problem)

This document goes through a sample problem and how we might go about creating a work plan and resource list in the process of solving it. The overall question to be answered is:

### “How should ALX go about launching its new City Hub in Cairo over the next 3 months?”

We will walk through how to:

1. Create a work plan; and
2. Identify resource requirements for this problem.

# Creating a Work plan

There are 5 key steps to take to formulate a work plan for the problem:

* 1. Restate deliverables & Identify Milestones
  2. List all tasks/activities.
  3. Estimate task duration, start and end times.
  4. Order tasks
  5. Create a timeline.

## Restate deliverables & Identify Milestones

The end deliverable will be a Google Sheets presentation on how ALX should go about launching its new City Hub in Cairo

Key milestones include:

* + Project Kick-off meeting on Day 1
  + Sign off on project requirements Day 3
  + Presentation of initial analysis/recommendations end of Week 3
  + Presentation of final recommendations at the end of Week 4

## List all tasks/activities

Try to keep the language as ‘deliverables’, ensure no overlap, and that each task /deliverable can be taken care of by one person/owner.

**Group/categorize tasks listed:** This will help organize the tasks and allocate responsibilities.

## Estimate task duration, start and end dates

Estimate how long it should take for the tasks to be completed (in days), and the dates when these tasks should be performed. Ensure that the task duration is aligned with the start and end dates.

## Order tasks

Think about what can be done in parallel (at the same time), and what needs to be done in sequence. Examples:

* + A, then B. To understand the problem first before starting research.
  + Within B, conducting interviews and analyzing info from HR can be done in parallel (by different team members)
  + Can start conducting interviews in C after identifying employee issues in B. Some team members can work on these interviews, whereas others can work on the presentation for key employee issues, thus saving time by working in parallel.

## Create a Timeline

Use the tasks, time estimations, ordering, and milestones to create a timeline in Excel. Keep in mind that the key elements of a timeline are:

* + Grouped task list on the left side.
  + A time scale, using a specific time interval (e.g., weeks or days) with non-working days highlighted if applicable. (e.g., shade Sat-Sun to highlight that these are non-working days)
  + Timeline showing the ordering of tasks in a logical manner.
  + Clearly marked milestones/deliverables
  + Any comments or responsibilities you wish to add for each task (on the right side)

# Resource Requirements

Based on this 4-week work plan, we will now identify the resource requirements. We will look at 3 types of resources:

* 1. Equipment
  2. Material/other resources
  3. People

## Equipment

Equipment requirements can include standard items for project work such as laptops, printers, and scanners. In addition to this specific equipment, requirements may be due to the actual tasks involved in the project/potential recommendations. e.g. video camera for recording quotes for a video.

You may also choose to distinguish between ‘equipment (e.g. laptop for use every day)’ and ‘access to facilities (e.g. printing in computer labs, meeting rooms multimedia projectors)’.

## Material/other resources

This project could include some special design software for the office.

## People

Before the actual start of the project work, it is critical to put together the right team. This could include Project Manager, core team members, client team members (if you are working as a consultant for a company), or other department team members (if you are working in a company in a particular department but need people resources from other departments as well) or even external experts (in areas where you need deep expert experience/insights).

It is useful at this point to think about how many people you need (number), who are the people you need (team members, client members, experts), and what skills you need them to bring (project management, industry expertise, video editing), what will their high-level roles look like. At this stage, it is less critical to detail what tasks each member will do.

### Example resource requirements for ALX in Cairo Problem Equipment

* + Laptops for each team member
  + Access to printer, scanner, rental of video camera
  + Access to multimedia projectors

### Material/other resources:

* + Software (for video editing)
  + Stationary for the project team
  + Team room

### People

* + Project Manager (core skill: project management, experience in the education sector)
  + Core team members (4 team members )
  + Client team members (e.g. one person from ABAX to work on this project for at least 20% of their time)
  + External experts (involve them on a per-hour basis as needed - education sector)