CareerSwami · Operations & Supply Chain

FREE TWO-WEEK INTERNSHIP

Project 1 — Keep a campus essentials store in stock without drowning in it

Five products, five different lead times, one hundred-rupee order fee and a supplier who is late one time in five. Too much stock and your cash is sitting on a shelf. Too little and students walk out. Your job is to find the policy that holds.

2 weeks	1 project	6–8 hrs
START TO SUBMIT	ONE SUBMISSION	PER WEEK

WHAT IS IN THIS BRIEF

1. The situation — the problem you are being handed
2. The four tensions your policy has to resolve — the cases your work must survive
3. What you are given — your data and starting files
4. What finished looks like — the two things you hand in
5. How the two weeks run — week by week
6. Before you start — rules, tools and your starter kit
7. How the work is judged — the marking scheme
8. How to submit — one link, pasted into your dashboard

Read 1 to 4 before you do anything. They take five minutes and they are what the marking scheme is built on. Sections 5 to 8 are the how — come back to them once you know what you are solving.

1 The situation

Treat this as a real client brief. The store is fictional. The trade-off — ordering cost against holding cost against the risk of running out — is the whole of inventory management, compressed.

A small campus store sells five things: notebooks, pen packs, water bottles, folders and phone chargers. Demand is steady and known. Lead times are not the same for any two products — five days for pen packs, seven for notebooks and folders, fourteen for bottles and chargers.

Every order placed costs a hundred rupees in fees regardless of size, which pushes you towards ordering rarely in large amounts. Holding stock costs twenty percent of its value a year, which pushes the other way. Chargers cost two hundred and fifty rupees each, so they are the expensive thing to hold — and they also have the longest lead time.

Supplier A is late on two orders in ten. Supplier B costs eight percent more and is late on one in ten. And in week four, demand for bottles doubles for a fortnight. Nobody at the store has ever written down a policy; they order when a shelf looks empty.

WHAT YOU ARE BEING ASKED TO DO

Replace "order when the shelf looks empty" with a written policy — reorder point and order quantity for every one of the five products — and show the five calculations that produced it.

2 The four tensions your policy has to resolve

Each of these pulls the policy in a different direction. A policy that only optimises one of them will fail on the others, and your KPI sheet has to show you were watching all four.

The ₹100 order fee

Pushes you towards large, infrequent orders.

Why the obvious answer is wrong — Follow it alone and you order a year of pen packs at once, tie up cash, and fill a stockroom you do not have. The fee is real but it is only one side of the equation.

20% annual holding cost

Pushes you towards small, frequent orders.

Why the obvious answer is wrong — Follow it alone and you pay the hundred-rupee fee constantly. On a twenty-rupee pen pack the fee dwarfs the holding cost; on a two-hundred-and-fifty-rupee charger it does not. The right answer is different per product, which is the point of the exercise.

Lead time, 5 to 14 days

You must cover demand during the wait.

Why the obvious answer is wrong — Chargers take fourteen days and sell twelve a week — that is twenty-four units in the pipeline before you add any safety stock. A reorder point set by feel will be set far too low on exactly the products where being wrong costs most.

Supplier reliability — A late 2 in 10, B 8% dearer and late 1 in 10

You have to choose, per product or overall.

Why the obvious answer is wrong — Eight percent more on every unit, forever, against halving the late rate. Whether that is worth it depends on what a stockout costs you — a number you were not given. Choose one, state your reasoning, and say what you would need to know to be sure.

Then week four doubles bottle demand for a fortnight. Bottles have a fourteen-day lead time, so by the time you notice, the order you would place arrives after the spike has passed. Your exceptions dashboard exists to catch this before it happens.

3 What you are given

Every number is given. The policy, the safety-stock rule and the supplier choice are yours, and they are where the marks are.

The five products — SKU, weekly demand, lead days, unit cost, opening stock

`Notebook 40 / 7d / ₹30 / 50` `PenPack 60 / 5d / ₹20 / 45` `Bottle 20 / 14d / ₹120 / 30`
`Folder 25 / 7d / ₹15 / 20` `Charger 12 / 14d / ₹250 / 18`

One SKU, part-worked, so the method is unambiguous

`SKU`	Charger
`Weekly demand`	12 units → 12 ÷ 7 = 1.71 per day
`Lead time`	14 days
`Demand during lead time`	1.71 × 14 = 24 units
`Safety stock`	your rule — state it, then apply it
`Reorder point`	24 + safety stock
`Order quantity`	balance the ₹100 fee against 20% a year on ₹250 — show the working

Four things the policy must state per SKU

`When to order` `How much` `From whom` `What to watch`

All figures are fictional. Do not contact real suppliers or use a real store's data. Seven days a week; annual holding cost is 20% of unit value. Where something is missing — the cost of a stockout, storage limits — choose a reasonable assumption and record it. A recorded assumption is good practice; an assumption presented as a given is not.

4 What finished looks like

At the end of two weeks you should be able to hand the store a one-page policy and a workbook, and have them follow it without you.

- **A process map, a KPI sheet and a quality log** — how stock actually moves from order to shelf today, the handful of numbers that tell you whether it is working, and a log of what has been going wrong and how often.
- **A written policy sheet with five worked SKU calculations** — reorder point and order quantity for each of the five products, each shown in full: the demand during lead time, the safety stock and how you set it, the order quantity and the reasoning that chose it.

Credit is for a policy someone could follow on a Tuesday morning without understanding the arithmetic behind it. Show the arithmetic, but the policy itself must be readable as instructions.

5 How the two weeks run

Work through it in two parts — but you submit **once**, at the end, not once per week.

PART 1 · WEEK 1

Map what happens before you optimise it

Draw the actual flow from noticing a gap to stock on the shelf, including the waiting. Decide what you would measure, and log what is currently going wrong.

Produce

- A process map from reorder trigger to shelf, with durations
- A KPI sheet: what you measure, how it is calculated, what good looks like
- A quality log of current failures and their frequency

> Your process map must separate waiting time from working time. Your KPIs must include at least one that would have caught the week-four bottle spike before it emptied the shelf.

PART 2 · WEEK 2

Write the policy and show every calculation

Compute reorder point and order quantity for all five products. Show the method once properly, then apply it. State your safety stock rule and your supplier choice in words.

Produce

- A policy sheet: reorder point and order quantity per SKU
- Five worked calculations, fully shown
- A stated safety-stock rule and a supplier decision with reasoning

> Order quantities must be whole units; demand estimates may be fractional. Any safety stock you set by feel must still be stated as a rule — "two days of cover" is a rule; "a few extra" is not.

6 Before you start

- Order quantities must be whole units. Fractional demand estimates are fine and expected.
- You may use the economic order quantity formula, or reason it out from the two costs directly. Either is acceptable; show the working.
- Safety stock has no single right answer here because you were not given a stockout cost. State your rule, apply it consistently, and say what you would need to set it properly.

- The supplier choice can be per-SKU rather than one decision for everything. If you split it, say why.
- The week-four bottle spike is in the data deliberately. A policy that does not mention it has not been tested.

Your tools

Google Sheets or Excel. A diagramming tool for the process map, or pen and paper photographed. No paid tool is required, and no ID document is ever required.

CS_operations-supply-chain_Starter_Kit.zip — stock.csv, a policy sheet template, a KPI sheet, a quality log, an evidence log, and a file index.
https://careerswami.com/wp-content/uploads/careerswami-projects/CS_operations-supply-chain_Starter_Kit.zip

7 How the work is judged

WHAT IS ASSESSED	WEIGHT
Problem and requirements — did you understand what you were solving	20%
The core artefact — the thing you actually made	40%
Validation and evidence — how you know it works	25%
Clarity and reproducibility — can someone else open and follow it	15%

Strong	Complete, correct, evidence-backed and easy to inspect.
Developing	A useful partial result, with the gaps explained.
Needs revision	Core deliverable missing, claims unverified, or the work cannot be opened.

Credit reflects demonstrated work, not visual polish. A small, honest result beats a large, unsupported one.

What counts as evidence

expected result → actual result → the calculation or workbook cell → conclusion. Then say what the evidence does not establish.

Why this one is worth doing. Operations interviews almost always include a version of this: here is some stock, here is a lead time, what would you order. Most candidates reach for a formula. The ones who do well say what they would measure, name the trade-off out loud, and tell you what number they would need to decide properly. That is what the KPI sheet and the stated safety-stock rule are testing.

8 How to submit

One link, pasted into your dashboard

1. Put your work somewhere with a link — Google Drive, Figma, GitHub, Notion, Loom. Whatever fits the work.
2. **Set it so anyone with the link can view.** A locked link is the single most common reason a submission comes back.
3. Include a short README or cover page saying what to open first, and where each deliverable lives.
4. Open your dashboard, paste the link into the submit box, and add a line or two on anything you want the reviewer to know.

Name files `CS_operations-supply-chain_YourName_v1`. Keep your own copy. A screenshot on its own is not enough for anything interactive. A video is optional — annotated screenshots or narrated slides are fine.

Submitted and heard nothing, or the link came back? Email **support@careerswami.com** with the email address you enrolled with.

Work honestly. Use fictional data and your own work. Credit anything you reused, and disclose AI assistance — including what you checked yourself. Never invent interviews, users, tests or results. Nothing here requires you to spend money, contact real organisations, or deploy anything publicly. Never upload identity documents, real customer records or credentials.

Stuck, confused, or something is broken? Write to us.

`support@careerswami.com`

Or WhatsApp **+91 7383138418**. We answer on working days. Use it for anything at all — a part of this brief that does not make sense, a starter file that will not open, a dashboard link that has stopped working, a deadline you need moved, or a submission you are not sure about.

To get a useful answer fast, spend twenty minutes narrowing the problem down first, then tell us four things: what you expected, what actually happened, what you already tried, and your one specific question. Include your track name and the email you enrolled with.

Asking is not penalised. Submitting partial work with a clearly stated blocker always scores better than a finished answer you copied, and better than a silent no-show.

Optional stretch

Optional, and only once the main work is done — cap it at an hour. Model the week-four spike and show what your policy does, or compare total annual cost under both suppliers. Label it clearly as a stretch.