Scrum in Practice

🏃 Sprint Planning Exercise

Elements of Software Engineering and Information Systems

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What we'll do

25 minutes, in groups of 4–5

1. 📋 Read the backlog
2. 🗣️ Assign roles
3. 🧮 Estimate and plan your sprint
4. ⚡ Simulate a Daily Scrum
5. 🔄 Debrief together

No coding required. Just thinking and negotiating.

The Scenario

You are a small data team at a startup.
A supermarket chain has hired you to build a customer analytics dashboard.
You have two weeks (one sprint) to deliver something working.

The Product

The dashboard should show:

- 📈 Daily sales totals
- 🛒 Top-selling products
- 🚨 Customers inactive for 30+ days

Step 1 – Assign Roles

⏱️ 2 minutes

Role	Responsibility
Product Owner	Priorities & business value
Scrum Master	Facilitates, removes blockers
Dev Team (2–3)	Estimates effort, plans work

💡 *Product Owner = the voice of the client, not necessarily the best coder*

Step 2 – Your Product Backlog

⏱ 5 minutes

ID	User Story	Priority
US1	See daily sales on a chart	⭐⭐⭐ High
US2	See top 10 products by revenue	⭐⭐⭐ High
US3	Export report as PDF	⭐ Low
US4	Filter data by store location	⭐⭐ Medium
US5	See customers inactive 30+ days	⭐⭐⭐ High
US6	Dashboard loads in < 3 seconds	⭐⭐ Medium
US7	Login page with password	⭐ Low
US8	Automatic weekly email reports	⭐ Low

Step 3 – Sprint Planning

⏱ 10 minutes

Your team capacity:

3 developers × 8 days × 6 hours = 144 hours

1 story point ≈ 8 hours of work → ~18 points available

Estimation scale:

Points	Effort
1	A few hours
3	About one day
5	Two days
8	More than three days

Step 3 – Estimate These Stories

User Story	Your estimate
US1 – Daily sales chart	? pts
US2 – Top 10 products	? pts
US4 – Filter by location	? pts
US5 – Inactive customers	? pts
US6 – Performance < 3s	? pts

🗣️ *Discuss as a team. No single person decides.*
What fits in 18 points? What stays out?

Step 4 – Daily Scrum (Simulated)

⏱️ 5 minutes

Each developer answers in **30 seconds**:

1. 🔵 What did I do **yesterday**?
2. 🟢 What will I do **today**?
3. 🔴 Any **blockers**?

Keep it short. This is not a status report to the manager.
It's the team synchronising with each other.

Step 5 – Group Debrief

⏱ 5 minutes

- Did all teams make the **same choices**? Why not?
- What happened when Product Owner and Dev Team **disagreed**?
- What if the client adds a **new requirement mid-sprint**?
- As data scientists – do you **recognise** this way of working?

Key Takeaways

✅ Don't plan everything upfront – **deliver something working each sprint**

✅ The Product Owner represents **business value**, not technical decisions

✅ Estimates are **collective** – the team decides, not the manager

✅ Agile works best when **everyone communicates continuously**

Scrum in One Slide

Product Backlog → Sprint Planning → Sprint (2–4 weeks)
↓
Daily Scrum (15 min)
↓
Sprint Review → Potentially Shippable Product
↓
Sprint Retrospective
↓
(next sprint...)

See You Next Sprint 🚀

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