Sample Student Answer – Interaction Design LAB02

A. Discover

Stakeholders:

- Direct: students ordering food, cafeteria staff.

- Indirect: suppliers (inventory), admin (payment system).

Pain points:

- Long waiting lines at lunch peak.

- Orders get mixed up when shouted over counter.

- Limited customization options (sauce, toppings).

Success metrics:

- Reduce waiting time < 5 minutes.

- 90% order accuracy.

- Student satisfaction ≥ 4/5.

Persona: Mai, 20, sophomore. Eats quickly between classes. Wants to pre-order noodles, avoid queues, and get notified when ready.

HMW statement: How might we help Mai order her customized noodles and pick them up in under 5 minutes without queueing?

B. Design Alternatives

Crazy-8s: sketched 8 quick ideas (voice order, QR codes, face recognition pickup, table delivery, etc.).

Chosen flows (2):

1. Mobile Pre-order App: students browse menu, customize toppings, pay, pick up at express counter.

2. Kiosk at Entrance: students tap student ID card, pick food, print order slip, collect when order ready.

C. Prototype (Figma low-fi)

- 3 key screens: Menu → Customize noodles → Payment/Confirmation.

- End-to-end task: Order noodles with toppings.

- Feedback states: Button highlight after tap, confirmation toast “Order #25 ready in 5 min”, progress bar showing wait.

D. Evaluate

Peer test results:

Task	Success	Time (s)	Confusion	Heuristic violated?	Fix
1: Select noodles	Y	30	-	None	-
2: Add toppings	Y	50	+ button small	Visibility	Enlarge + button
3: Checkout & confirm	Y	40	Where’s pickup counter?	Feedback	Add pickup info

Heuristic check:

- Visibility: + button unclear.

- Feedback: pickup location missing.

- Constraints: payment only after menu complete (works).

- Consistency: same button style across screens (ok).

- Affordance: buttons look clickable (ok).

3 fixes applied:

1. Larger “+” button for toppings.

2. Add pickup counter info on confirmation screen.

3. Progress bar more prominent (placed at top).