

# Information & Communication Architecture — Lab 3 — Figma Auto-Layout & Component Architecture

# Contacts

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## Lab agenda

| Duration | Topic                                                                   |
|----------|-------------------------------------------------------------------------|
| 10 min   | The Architecture Pipeline: Site Map → IA Diagram → Wireframe → UI       |
| 10 min   | Auto-Layout & Containers: Direction, Gap, Padding & Sizing              |
| 10 min   | Component Systems: Main Components (Master) vs. Instances (Copies)      |
| 10 min   | TA Live Demo: Building Reusable Cards & Assembling Mobile Views         |
| 45 min   | <b>Graded In-Class Sprint:</b> Wireframe-to-UI (2 Core Screens + Bonus) |
| 5 min    | Grading Rubric, Self-Audit Checklist & Wrap-Up                          |



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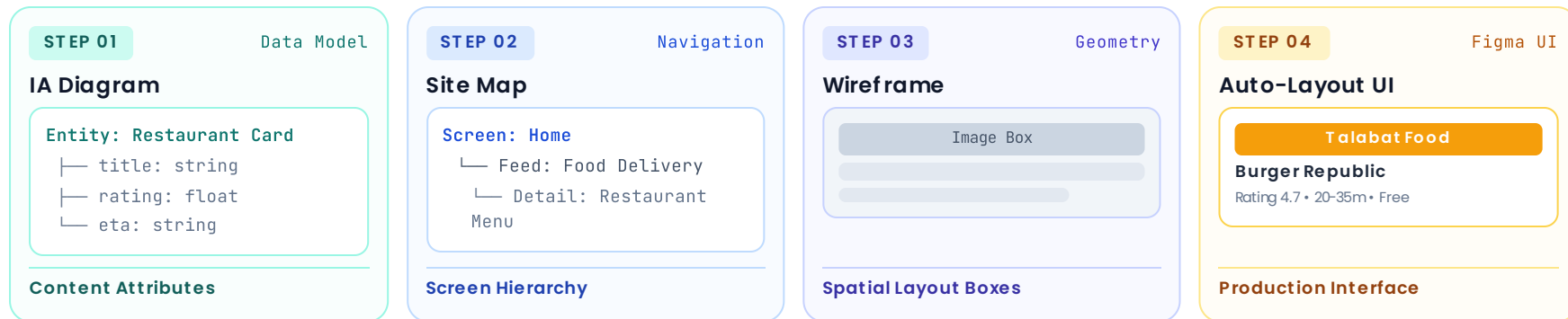
# 01 — Architecture pipeline

Bridging high-level information structures with tangible interface layouts



# The architecture pipeline: From IA to UI

Every visual container in Figma traces directly back to an architectural data node:





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## 02 — Auto-Layout & containers

Mastering Auto-Layout hierarchies, bounding frames, and responsive container mechanics



# Auto-Layout container mechanics

## Mental Model Auto-Layout = CSS Flexbox

Eliminates manual pixel-nudging: positions, spaces, and aligns children mathematically.

### CONTAINER BOUNDARY (FRAME)



**RULE** Zero static groups ( `Ctrl+G` ). Always use Auto-Layout ( `Shift+A` ).

## Auto Layout Controls

Shift + A

Flow Direction

↓ Column

→ Row

Alignment Matrix (9-pt)



Item Gap

8 px

Padding

16 px

Figma Design Sidebar Inspector

8pt Grid Ready



# Sizing dynamics: Fixed vs. Hug vs. Fill

How containers behave along their layout axes dictates mobile responsiveness:

Fixed

Rigid

## Fixed Sizing

LOCKED

Fixed: 393 px

Width stays strictly constant

**Use cases:** Phone frames, avatars, icons.

**Avoid on text containers**

Hug

Intrinsic

## Hug Contents

→ Order Now ←

Shrinks boundary around child text

**Use cases:** Buttons, category pills, badges.

**Expands dynamically with text**

Fill

Elastic

## Fill Container

←

100% Parent Width

→

Stretches to consume full screen width

**Use cases:** Feed cards, search inputs, carousels.

**Guarantees screen responsiveness**

**The Golden Rule:** Screen = Fixed | Cards = Fill | Inner Text = Fill | Buttons = Hug

Formula



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## 03 — Component systems

Architecting modular, reusable UI building blocks and understanding master-to-instance inheritance



# Component systems: Master vs. Instances

**Master Component** **The Blueprint** Ctrl + Alt + K

Single source of truth. Lives strictly on **Page 3 (Assets)**.

**RestaurantCard (Master)** Page 3: Assets

[Image: Fill Width x 140px]

[Title Slot: Hug]

[Cuisine • ETA Slot]

[Delivery Fee Slot]

[Rating Slot]

**Global cascade:** Edit geometry, radii, or padding here → **all screens update instantly**.

**DO** Override content directly inside screen instances without touching geometry.

**Instances** **Screen Clones** Alt + Drag

Deployed on **Page 4 (Screens)**. Same geometry; localized overrides.

**Card** Screen 1

Burger Photo

**Burger Republic**

American • 25m

Free Delivery 4.7

Override: Copy & Photo

**Card** Screen 2

Pizza Photo

**Papa John's Pizza**

Italian • 20m

Free Delivery 4.5

Override: Copy & Photo

**Allowed overrides:** Restaurant title, food photo, ETA, price, and rating pills.

**DON'T** Never **Detach Instance** ( Ctrl+Alt+B ). It destroys the design system.



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## 04 — TA live demonstration

Step-by-step construction of a reusable Restaurant Card component and its multi-screen deployment



# Live demo: Building reusable mobile cards

## STEP 1

Shift + A

### Assemble Auto-Layout

- Food Image: Fixed 140px, Width Fill
- Content Frame: Gap 8px, Padding 12px
- Card Container: Width Fill Container

Container Elasticity

## STEP 2

Ctrl + Alt + K

### Promote to Master

- Select outer card frame
- Create Master: Ctrl+Alt+K
- Cut & Paste onto **Page 3 (Assets)**

Master Separation

## STEP 3

Alt + Drag

### Deploy & Override

- Deploy instance to **Screen 1, 2, & 3**
- Verify card stretches with Fill Container
- Override restaurant name, image, and ratings

Instance Deployment



**Burger Republic**

talabat pro

American, Sandwiches • 20–35 mins • EGP 22.99 Delivery

RATING 4.7 (1k+)



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# 05 — Graded in-class sprint

45-minute graded in-class assignment — 2 Core screens (Mandatory) + 1 Bonus screen for extra credit



# Graded In-Class Assignment: Wireframe- to-UI Translation

**GRADED** Core: Screens 1 & 2 (100% Credit) • Screen 3: Bonus (+Extra Credit)

[Figma Starter Kit](#)

[Brand Guidelines](#)

## Screen 1: Home

**Mandatory (50%)**

- Location header & search input bar frame.
- 5 service category icons grid (Food, Mart, Groceries...).
- Promotional banner carousel (Buy 1 Get 1 Free).
- Redeem points / vouchers card & bottom navigation bar.

**Core Deliverable (50%)**

## Screen 2: Food Delivery

**Mandatory (50%)**

- Navigation header with back button and delivery address.
- Horizontal deals promo row & cuisine category pills.
- Filter pill bar (Sort by, Offers, Fast Delivery).
- Vertical restaurant feed using component instances.

**Core Deliverable (50%)**

## Screen 3: Restaurant Menu **BONUS (+Extra)**

- Hero cover photo header with back & share actions.
- Floating restaurant card (rating, delivery ETA, pricing).
- 2-column dish card grid feed with food photos & prices.
- Sticky bottom order / "View Cart" CTA button.

**Bonus Deliverable**

**+Extra Grade**



# Comprehensive grading criteria & rubric

Your submission will be evaluated out of 100% across four core architectural pillars:

## Pillar 1: UI/UX

25%

- **Visual Dominance:** Scannable titles & badges
- **WCAG AA:** Minimum 4.5:1 body text contrast
- **8pt Spatial Grid:** 8px / 16px / 24px rhythm

UX Foundations

## Pillar 2: Auto-Layout

25%

- **Zero Static Groups:** 100% inside Shift+A
- **Sizing Rules:** Hug buttons, Fill cards
- **Elasticity:** Stretches cleanly 393px → 420px

Container Elasticity

## Pillar 3: Components

25%

- **Master Separation:** Masters on Page 3
- **Strict Instances:** Only ◇ inside screens
- **Component Reuse:** Shared Nav & Cards

System Reusability

## Pillar 4: Brand

25%

- **Colors:** Talabat Orange (#FF5A00), Slate
- **Typography:** Official Poppins system
- **Corner Radii:** Consistent 8px / 12px

Visual Polish

Brand Guide ↗

**BONUS GRADE** Screen 3 Bonus (Restaurant Menu): Implement Menu page with Auto-Layout & component reuse for **extra grades!**

+Extra Points



# Student Self-Audit Protocol

## 1. Width Stress Test

Drag screen width 393px → 420px. Cards & inputs must stretch smoothly via Fill Container.

## 2. Master Separation

Screens contain strictly instances (◇). Zero master components (◆) on Page 4.

## 3. Multi-Screen Reuse

Screen 2 & Bonus Screen 3 reuse Bottom Nav and Card components from Page 3.

## 4. WCAG AA & 8pt Rhythm

Contrast  $\geq 4.5:1$  on body text; all paddings/gaps adhere strictly to 8pt multiples.



## SELF-AUDIT PROTOCOL

Before requesting checkoff from a TA:

**Step 1:** Complete all 4 audit checks on the left.

**Step 2:** Verify Core Screens 1 & 2 (and optional Bonus Screen 3: Menu) are on Page 4.

**Step 3:** Copy your Figma file share link (Permissions: "Anyone with the link can view").

**Step 4:** Call a TA to your screen for live evaluation and submit the link to your portal.



# Sprint active — Open the Figma Community template

GRADED (100 PTS)

SPRINT ACTIVE

Screens 1 & 2 (Mandatory) + Screen 3 (Bonus)

45-50 Mins

## Figma Community Starter Kit

Wireframes, sitemap, tokens & student workspace

Duplicate ↗

## Brand & Typography Guide (PDF)

Poppins scale, official HEX colors & 8pt grid tokens

Open PDF ↗

### 1. Home Screen

Mandatory (50%)

Search bar frame, 5-service category grid, promo specials banner, and bottom navigation bar.

Scope: 4 Auto-Layout Containers

### 2. Food Delivery

Mandatory (50%)

Horizontal filter pills, deals carousel, and vertical feed of reusable Restaurant Cards.

Scope: Component Instance Reuse

### 3. Restaurant Menu

BONUS (+Extra)

Hero banner, floating info card, 2-column food dish grid, and sticky bottom order CTA.

Scope: Overlap & 2-Col Grid

# Submission





# References & useful links

## LAB 03 CORE RESOURCES

**Figma Community — Official Talabat ICA Starter Kit** — wireframes, IA sitemap & student workspace

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**Google Drive — Talabat Brand & Typography Guidelines (PDF)** — official Poppins scale & design tokens

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## FIGMA OFFICIAL DOCUMENTATION

[Figma Learn — Auto Layout Properties & Constraints](#) — official mechanics guide

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[Figma Learn — Components and Instances](#) — master component architecture

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