Paraphrased android prompt

Components are described in a **modular**, reusable, and adaptive fashion. The prompt below can be directly used to instruct a design or development team, or to guide a UI/UX tool like Figma or Android Jetpack Compose.

📱 Android App UI Prompt: Adaptive Stream + Control Interface

📌 Objective

Design adaptive Android UI layouts for a camera streaming and control app, ensuring consistent behavior across all screen sizes. The UI is modular, responsive, and functionally segmented.

🧱 Common Layout Structure

- **Two Panes**:
    - **Left Pane**: Live camera stream display.
    - **Right Pane**: Dynamic control and status interface.

Each layout adapts based on user interactions and current app mode.

🧩 Layout Modes

🔹 Layout 1: Minimal Control Panel (Stream Focused)

- **Proportions**: Left = 90%, Right = 10%
- **Function**: Compact controls + status indicators. Meant for immersive viewing.

✅ **Components**

- Settings button
- Camera switch button (for toggling between multiple cameras)
- Recording toggle button
- Directional compass
- Battery indicator
- Connectivity indicator (WiFi/LTE)
- AI status (Enabled/Disabled)
- Speed indicator (from phone sensors)
- Right-side Expand Button (mid-edge) → Expands to Layout 2

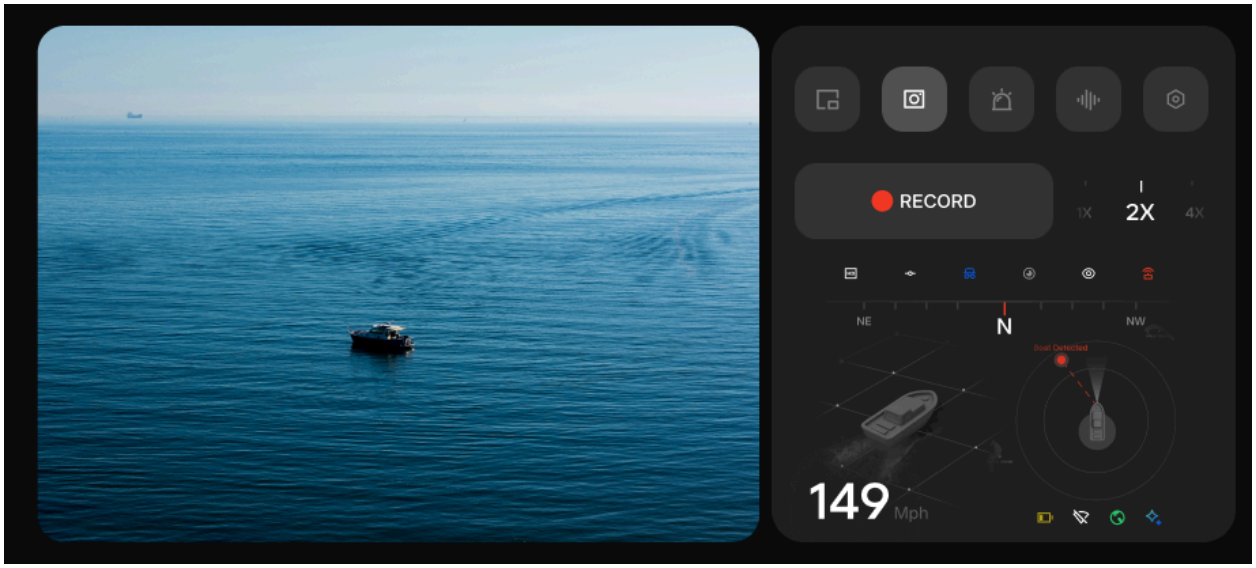
🔹 Layout 2: Expanded Control Panel (Interactive Controls)

- **Proportions**: Left = 60%, Right = 40%
- **Function**: Intermediate control layout with dynamic and scrollable options.

- **Settings Button Click** → Navigates to Layout 3

✅ Right Panel Components

- **Row 1**: Customizable 5-button row
    - Buttons have configurable: icon, text, color, function
- **Row 2**:
    - Left: Recording toggle
    - Right: Scrollable zoom selector (1x, 2x, 4x)
- **Row 3**: 6 toggleable icons based on user settings
- **Row 4**: Compass component (live direction feedback)
- **Row 5**: Two static display placeholders:
    - Video feed slot
    - Snapshot image slot
- **Row 6**:
    - Speed (from sensor)
    - 4 Status indicators:
        - Battery
        - WiFi
        - Online/Offline
        - AI Enabled/Disabled



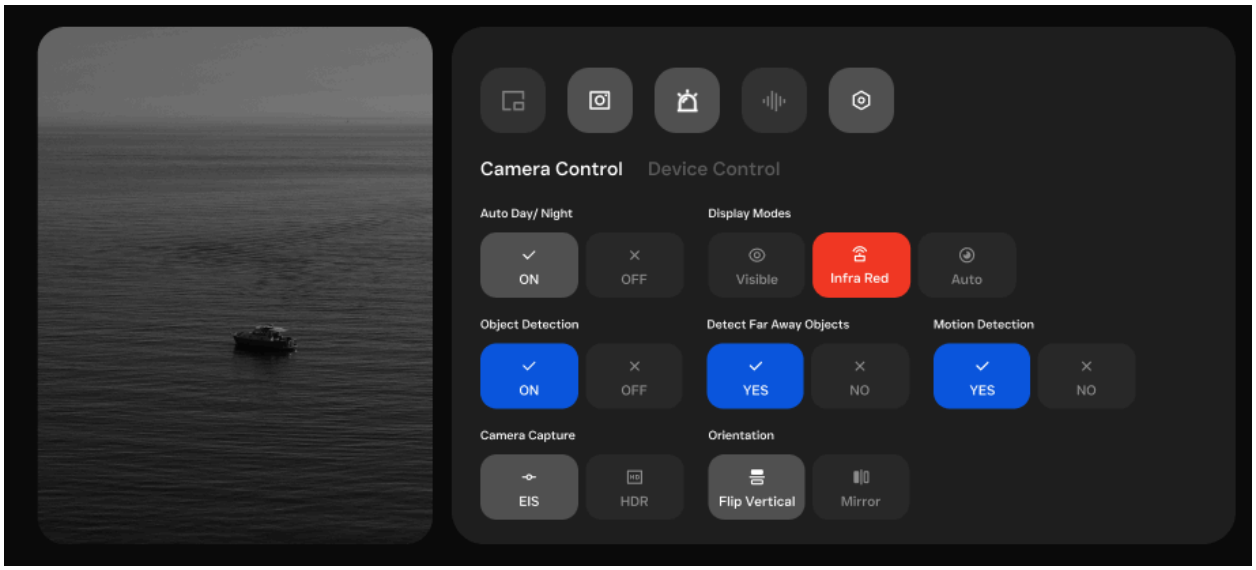
🔹 Layout 3: Full Control Panel (Settings and Configuration)

- **Proportions**: Left = 45%, Right = 55%
- **Function**: In-depth device/camera configuration.

✅ Right Panel Components

- **Row 1**: Customizable 5-button row (icon/text/color/callbacks)
- **Row 2**: Tab switcher between:
    - **Camera Control**
    - **Device Control**
- **Row 3**: Display Settings
    - Auto Day/Night Mode (toggle)
    - Vision Mode (select: Vision, Infrared, Both)
- **Row 4**: Detection Toggles
    - Object Detection (on/off)

    - Far Object Detection (on/off)
    - Motion Detection (on/off)
- **Row 5**: Image Settings
    - Camera Mode: HDR / EIS / Both
    - Orientation: Flip / Mirror / Both



♻️ Component Abstraction Guidelines

- Use **custom composables** (or views) for reusable UI elements:
    - Buttons: Configurable with icon, label, color, action
    - Indicators: Battery, Connectivity, AI Status
    - Compass & Speed widgets
- Ensure responsive layouts with **ConstraintLayout** / **Jetpack Compose BoxWithConstraints** for scale adaptability.
- Use **lazy scrollables** or horizontal rows for icon selection when needed.

👩‍💻 Deliverables (based on this prompt)

- Wireframes for all 3 layouts
- Jetpack Compose implementation templates for:
    - Custom buttons
    - Status indicators
    - Control panel sections
- Responsive layout previews for tablets, phones
