

UI/UX DESIGN

Trends & Highlights

Oven UX / UI project using Qt technology



DESIGN CONTEXT AND GOALS

WHAT

UX/UI design trends scenario

WHERE

Home appliances, smart ovens

HOW

Exploring opportunities and challenges of future UI balancing aesthetics and functionality

WHEN

From 2021 to 2023 (and after)

UX/UI SCENARIO

5 TRENDS TO LOOK AT

1 Moving towards **mixed interaction**

Mixed interaction through voice and gesture combined with visual aid and classic touch controllers

3 **UX/UI simplification and optimization**

Moving to less-thinking action toward a natural behaviour to increase user satisfaction and accessibility

5 **3D models**

3D graphics and elements to engage user and present object virtually to create immersive experiences

2 Advanced **personalization**

Different from customization, make the user feel the content has been created especially for him

4 **Animations and transitions**

Mobile-like animated interactions: smooth and pleasing transitions for user encouragement and help in navigation

UX TRENDS IN OVENS

TOUCH SCREEN INTERACTION

Digital touch-screen display with enhanced graphics and UI

TOUCHLESS / HANDS FREE COOKING

Voice, gesture, visual aid

GUIDED COOKING

Step by step recipes and instructions

SMART COOKING SYSTEM

tracked and auto-regulated cooking mode through smart sensors for smell, temperature, color...



APP & HUB

Companion app & kitchen smart hub

SMART FOOD ID

Food recognition through camera

INCREASED CONNECTIVITY

to other appliances: fridge, mixer, etc.

SOCIAL INTERACTION

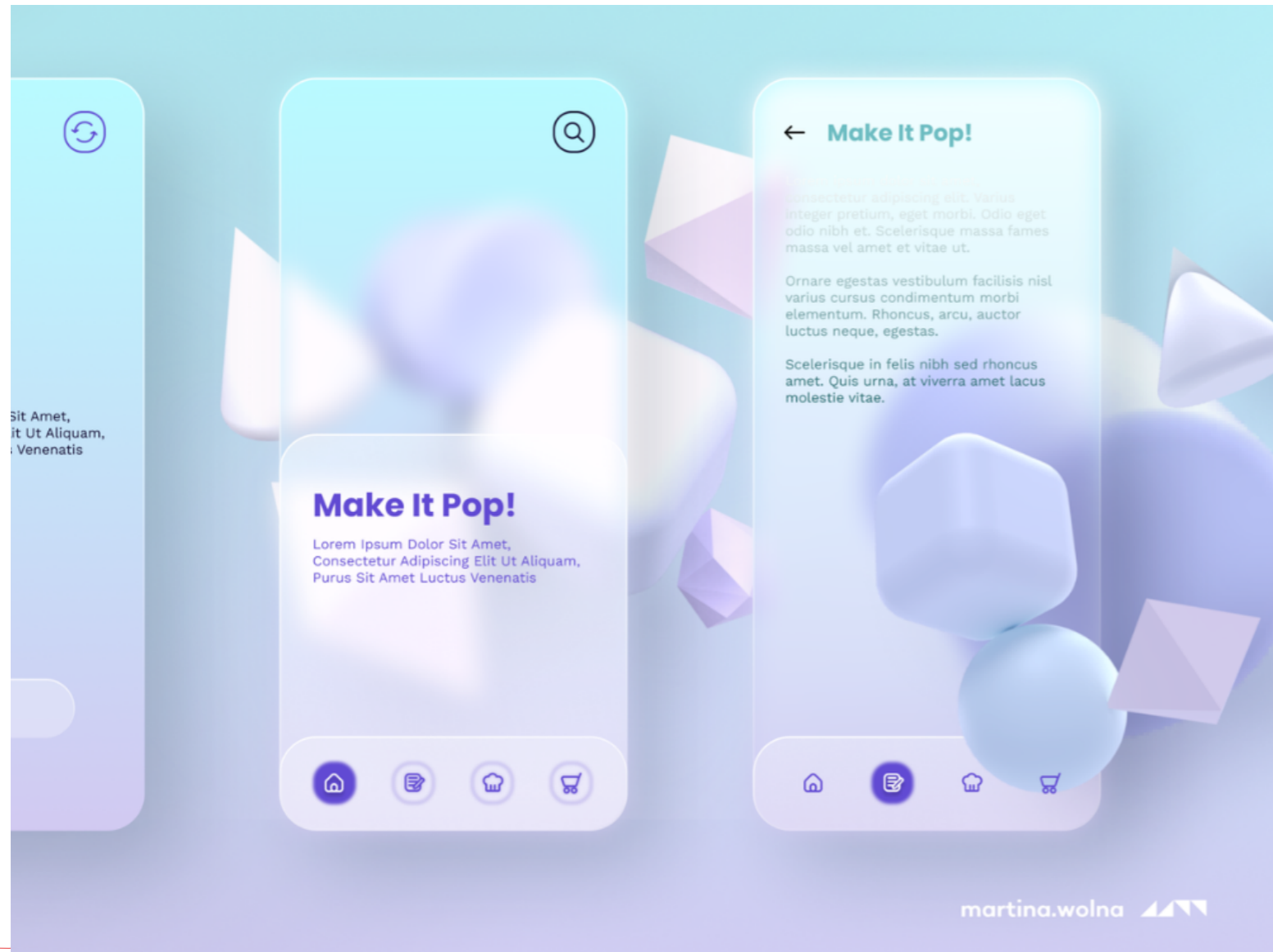
virtual cooking experience / tutorial / masterclass / remote cooking

UI TRENDS GUIDELINES



3D ELEMENTS
such as icons, product
representation, transitions

UI TRENDS GUIDELINES



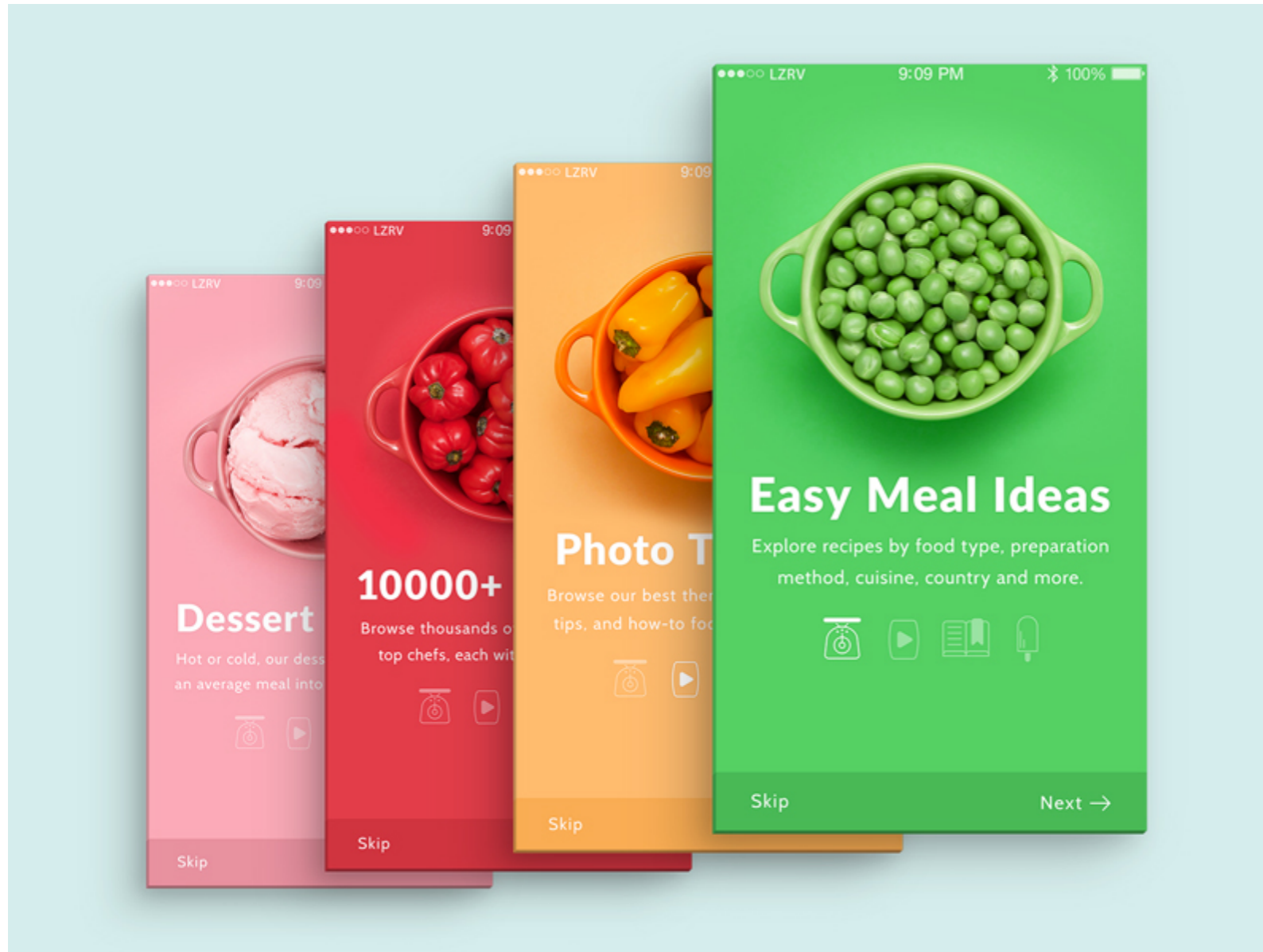
GLASSMORPHISM
Soft shadows, layers and floating elements

UI TRENDS GUIDELINES



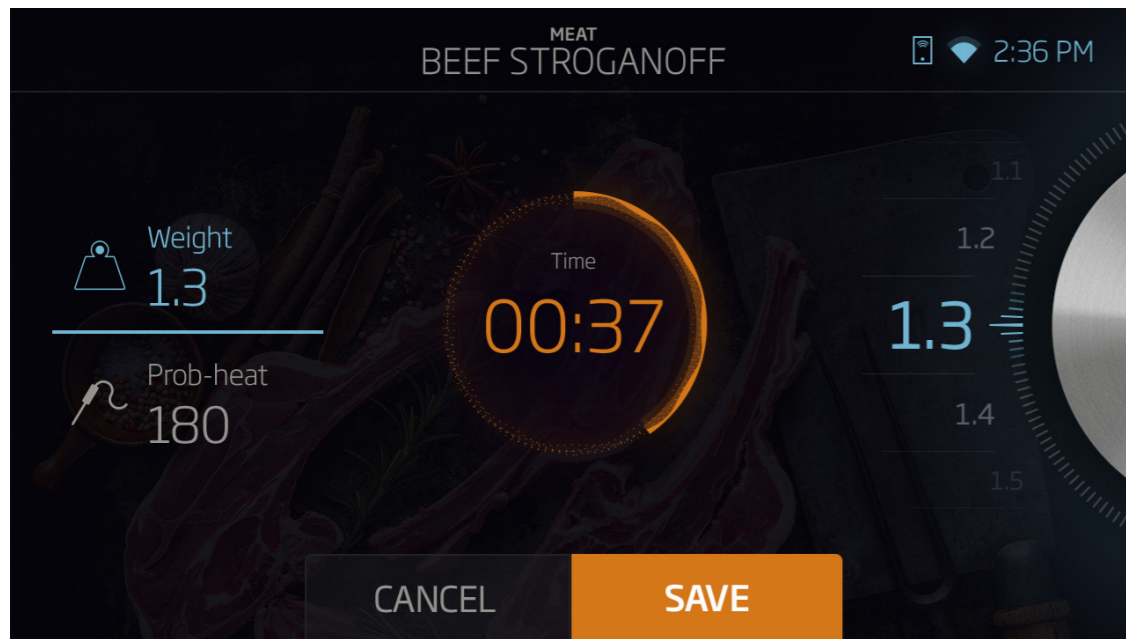
NEUMORPHISM

Minimal design, plastic extruded look, mimicking real textures



TYPOGRAPHY MATTERS
Bold & easy to read fonts
UX writing and microcopy

UI TRENDS GUIDELINES

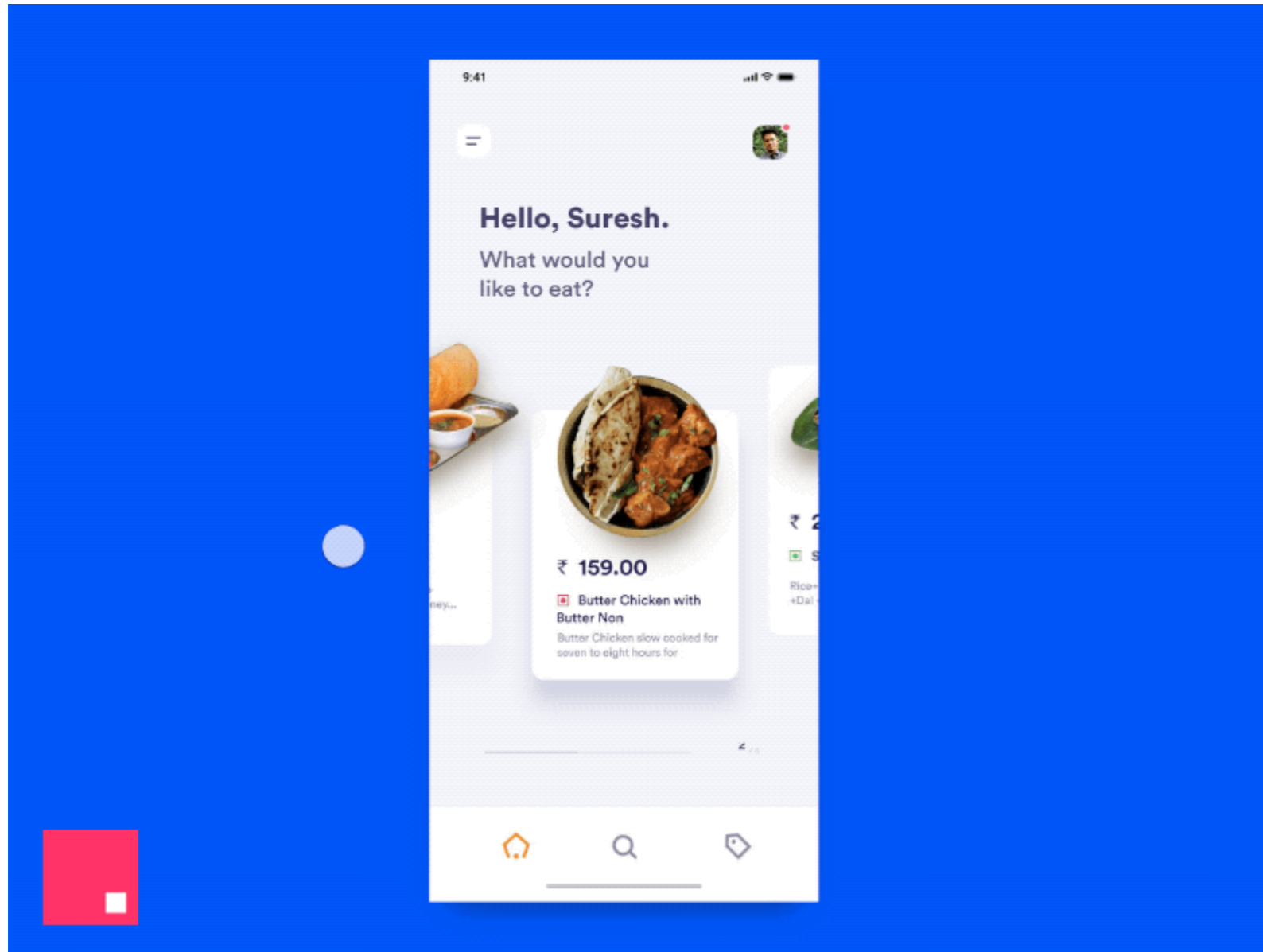


DARK MODE/ADAPTIVE BRIGHTNESS

High contrast design, maximize readability and give a modern look

UI/UX DESIGN FOR Qt

UI TRENDS GUIDELINES



MOBILE LOOKING

Animation, transitions and UI with an app-like look and feel

To watch the animation file click the following link

<https://i.pinimg.com/originals/9e/e2/f3/9ee2f356e92bf5d4ad44f8a153870d4a.gif>

UI FEATURES

LOW-END

Basic UI design

- ✔ Modern aesthetics
- ✔ Custom icons
- ✔ Textures
- ⊖ Photo/ images
- ⊖ 3D Micro Animation
- ⊖ Smooth transitions
- ⊖ Video

MID-RANGE

Advanced UI design

- ✔ Modern aesthetics
- ✔ Custom icons
- ✔ Textures
- ✔ Photo / images
- ✔ 3D Micro animations
- ✔ Smooth transitions
- ⊖ Video

HIGH-END

Advanced UI design

- ✔ Modern aesthetics
- ✔ Custom icons
- ✔ Textures
- ✔ Photo / images
- ✔ 3D Micro animations
- ✔ Smooth transitions
- ✔ Video

TARGET HARDWARE

Trends & Selected Items

Oven UX / UI project using Qt technology



FUTURAE

powered by  **domina**
data management

TARGET HARDWARE



UI/UX DESIGN FOR Qt

DISPLAY TREND **LOW-END**



UI/UX DESIGN FOR Qt

Vivo Screen

Vivo screen 4.3" or Vivo Screen Max 6.3" LCD mounted on SMEG ovens

DISPLAY TREND MID-RANGE



UI/UX DESIGN FOR Qt

GE Profile
7" touch-screen Full HD display
mounted on **GE Profile™ 30"**

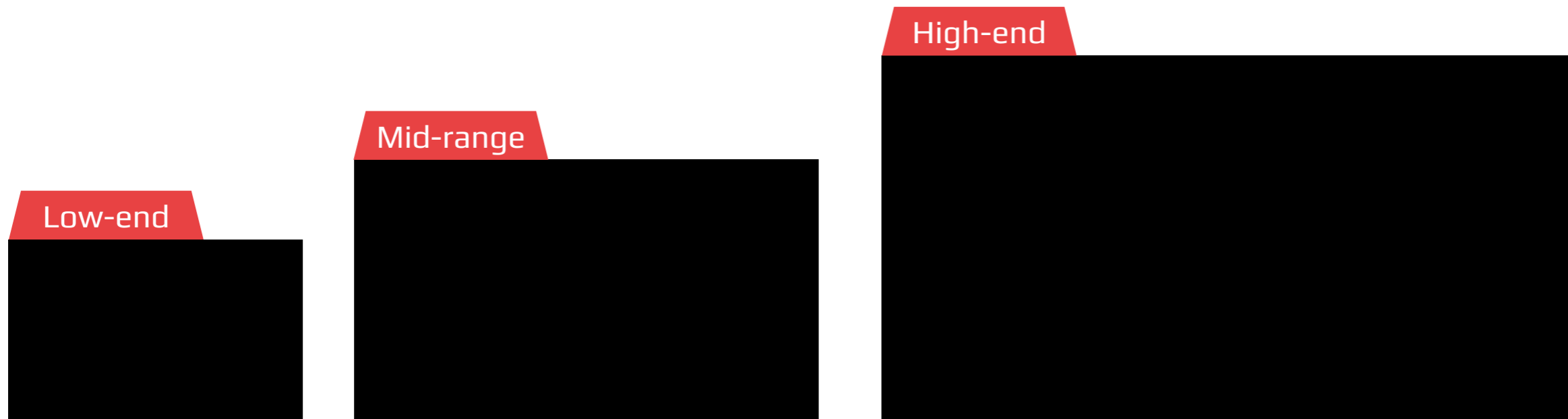
DISPLAY TREND HIGH-END



GE Kitchen Hub
27-inch integrated smart-touch screen and ventilation combo

UI/UX DESIGN FOR Qt

DISPLAY CONFIGURATIONS



Qt for MCU

STM32F469I

No connection

4.3" 480x272
Touch Display

Qt for MCU

STM32H750B

Bluetooth

7" 1024x600
Touch Display

High-end

Full Qt Framework

On-Lap M505T

Bluetooth & WI-FI

15.6" 1920x1080P
Touch Display

<https://www.gechic.com/en/m505t-touch-monitor/spec/>

UI/UX DESIGN FOR Qt

TASK 1 MAIN FEATURES

Clock

- Idle
- Timer

1

Feature 1

- Normal Cooking + add to Favourites

2

Feature 2

- Scheduled Cooking

3

Feature 3

- Handling of Settings (e.g. language, date, clock, sounds)

TASK 1 INNOVATIVE FEATURES

LOW-END

- ✔ **Push-notification for step-by-step cooking**
- No oven communication

MID-RANGE

- ✔ **Push-notification for step-by-step cooking**
- Local sensors + Remote control of step-by-step cooking and oven configuration**
- Bluetooth based communication

HIGH-END

- ✔ **Push-notification for step-by-step cooking**
- Local sensors + Remote control of step-by-step cooking and oven configuration**
- ✔ **Remote/social cooking for virtual cooking experience / tutorial / masterclass**
- Bluetooth + WI-FI based communication

REFERENCE & SOURCES

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<https://uxdesignn.cc/>

<https://uxstudioteam.com/ux-blog/ui-trends-2019/> (updated to 2021)

<https://medium.com/codica/leading-ui-ux-web-design-trends-in-2020-2021-6bf991129072>

<https://www.geappliances.com/ge/kitchenhub/>

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