

This is the initial screen, i.e <u>home screen</u> (HS), when the App is turned on or the [home] button is pressed.

[Sign In] button navigates to Wafeframe[Sign-in]
[Create Account] button navigates to Wafeframe[Create Account]

Note: User accounts should be kept in the devise and in the cloud.

[Noise Detection] jumps to Wireframe[Noise Detection]

Note 1: You could choose the screen orientation to be either portrait or landscape

Note 2: You may use any artworks

Note 3: The screen layouts are reference only

Sign-in (Wireframe) Sign In with email or Moble# Email/Mobile# Password Confirm Password or sign in through **HOME NEXT**

An User can either sign in using (A) Email/Mobile# OR (B)a social media login

After (A) or (B) is completed User presses [**NEXT**] If the Account is verified it goes to Wireframe[Noise Detection] otherwise, it display a message asking to re-sign-in. (Account Locking might be needed after 3 attempts?)

(B) is **optional**

Press [HOME] cancel the current task and navigates back to HS



An User can either crate an account using (A) Email/Mobile# OR (B) a social media login

After (A) or (B) is completed User presses [**NEXT**] and it goes to Wireframe[Noise Detection]

(B) is optional

Press [HOME] cancel the current task and navigates back to HS

Noise **Detection** (Wireframe) Noise Level Very noisy Noisy Average Hearing Test Should always be conducted in a Quiet or Very **Quiet** Environment Quiet Very quiet

The microphone(s) will start to pick up the surrounding noise and display the noise in dB in 2 places:

- (1) in the center with proper color and
- (2) (**optional**) move the pointer along the Noise Level Bar in the correct color region and scale. The colors of the noise level do have meanings, therefore, it is preferred to use a color system close to this wireframe.

Note: iPhone, by default, returns a value of 0 dB indicates full scale, or maximum power; a return value of -160 dB indicates minimum power (that is, near silence). see: https://developer.apple.com/reference/avfoundation/avaudiorecorder/1387176-averagepower

However, following the common practice, we advise to set the 50 dB when the noise level is detected in a quite room. The dB scale then can be calculated using logarithmic scale.

[BACK] goes back to the previous screen [HOME] goes to <u>HS</u> [NEXT] goes to Wireframe[Equlizer]

Equalizer (Wireframe) 70 60 50 60 50 SAVE

The microphone(s) will start to pick up the sound and display multiple (>= 12) frequency bands for the left and right ears/microphones.

The knobs of the frequency bands shall be placed at the horizontal bar initially.

Adjust the knobs shall increase or decrease the volume of a particular frequency.

(Optional) The BLUE and RED curves are plotted when the knobs are adjusted to enhance visual effect

[BACK] goes back to the previous screen

[HOME] goes to HS

[SAVE] saves the current knob settings into a user's profile database; display a WARNING message: "Equalizer setting can only be saved when an User has log into his/her account.. Please press HOME button to login your account or create an account"