

# Exercises

## Hubble Banner

Create a banner (also called a hero) like the image below. Read the next page for hints.



## Hints

- Open `/Solutions/Hubble/index.html` to see the final result.

## Layout

- The banner should take up the entire height of the viewport.
- The heading and the tagline should be horizontally and vertically in the center of the banner.

## Image

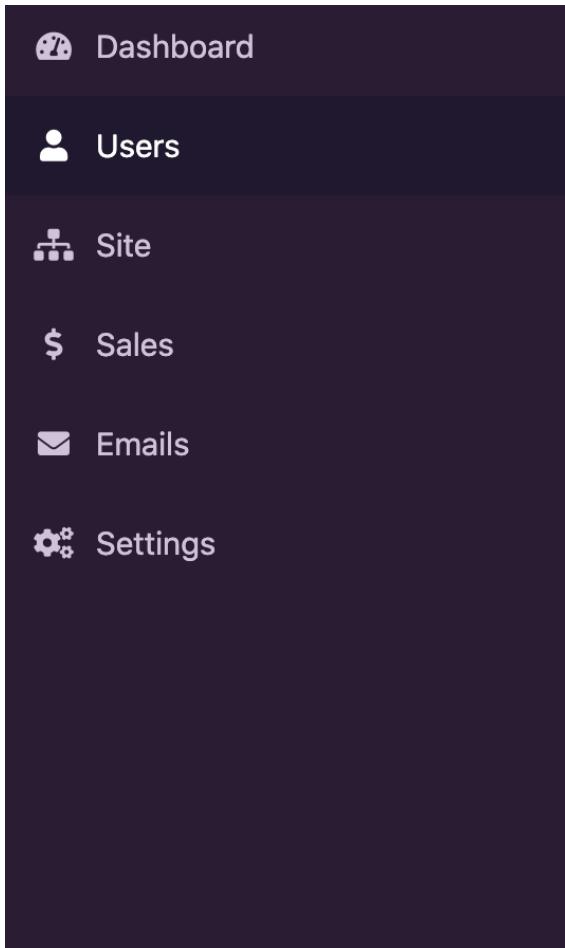
- Get the image (medium size) from here: <https://unsplash.com/photos/E0AHdsENmDg>
- The medium-sized image has the resolution of **1920x1311** and the file size of **700KB**. Serving this image to smaller screens like mobiles and tablets is far from optimal. All the extra bytes downloaded by the browser will be wasted and the browser has to load this large image for resizing. Use <https://www.responsivebreakpoints.com/> to create 4 versions of this image for screens with the resolution of 320 - 1440.
- The width of generated images will be **320px** (for small mobiles), **853px** (for tablets), **1228px** (for tablets) and **1440px** (for desktops). Use media queries to set the right background image depending on the viewport width.
- Remember: the more variations of the image we supply, the better we can optimize for various screen sizes but 4 is enough for this exercise.
- Use the **Device Mode** in **DevTools** to ensure the page looks good on various screen sizes.
- Open the **Network tab** and ensure that the right image is downloaded for the right screen.

## Text

- Use the **Poppins** font (available on Google Fonts) with the weights of **900** (for the heading) and **300** (for the tagline).
- To make the heading better stand out on the background, give it a small black shadow.
- To make the heading more readable, increase the space between the words.
- Note that the tagline includes a semi-transparent black background to improve readability. To make the background semi-transparent, use an `rgba` color.

## Menu with Icons

Create a menu with icons similar to the image below. Read the next page for hints.



- Open **/Solutions/Menu/index.html** to see the final result.
- Use the **system font stack**.
- The background for the menu is **#2a2138**.
- The background for the selected item and the hover effect is **#221a2e**.
- On mobiles, the menu should have a width of 100% and be tall enough to fit its content.
- On tablets or wider screens, the menu should have a width of 20% and take up 100% of the height of the viewport.
- Use Font Awesome to display the icons.
  - Dashboard: **fa-tachometer-alt**
  - Users: **fa-user**
  - Site: **fa-sitemap**
  - Sales: **fa-dollar-sign**
  - Emails: **fa-envelope**
  - Settings: **fa-cogs**