week4

For Gird Part

Home.js

```
import * as React from 'react';
import { styled } from '@mui/material/styles';
import Box from '@mui/material/Box';
import Paper from '@mui/material/Paper';
import Grid from '@mui/material/Grid';

const Item = styled(Paper)(({ theme }) => ({
  backgroundColor: theme.palette.mode === 'dark' ? '#1A2027' : '#fff',
  ...theme.typography.body2,
  padding: theme.spacing(1),
  textAlign: 'center',
  color: theme.palette.text.secondary,
}));

export default function Home() {
  return (
    <Box sx={{ flexGrow: 1 }}>
      <Grid container spacing={2}>
        <Grid item xs={12} sm={12} md={12}>
          <Item>Header</Item>
        </Grid>
        <Grid item xs={12} sm={12} md={12}>
          <Item>Home Image</Item>
        </Grid>

        {/* item start */}
        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>


        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>


        {/* item end */}


        <Grid item xs={8} sm={6} md={12}>
          <Item> Footer</Item>
        </Grid>
      </Grid>
    </Box>
  );
}
```

For Header Part

header.js

```
import * as React from 'react';
import AppBar from '@mui/material/AppBar';
import Box from '@mui/material/Box';
import Toolbar from '@mui/material/Toolbar';
import IconButton from '@mui/material/IconButton';
import Typography from '@mui/material/Typography';
import Menu from '@mui/material/Menu';
import MenuIcon from '@mui/icons-material/Menu';
import Container from '@mui/material/Container';
import Avatar from '@mui/material/Avatar';
import Button from '@mui/material/Button';
import Tooltip from '@mui/material/Tooltip';
import MenuItem from '@mui/material/MenuItem';
import AddAPhotoIcon from '@mui/icons-material/AddAPhoto';

const pages = ['Products', 'Pricing', 'Blog'];
const settings = ['Profile', 'Account', 'Dashboard', 'Logout'];

function ResponsiveAppBar() {
  const [anchorElNav, setAnchorElNav] = React.useState(null);
  const [anchorElUser, setAnchorElUser] = React.useState(null);

  const handleOpenNavMenu = (event) => {
    setAnchorElNav(event.currentTarget);
  };
  const handleOpenUserMenu = (event) => {
    setAnchorElUser(event.currentTarget);
  };

  const handleCloseNavMenu = () => {
    setAnchorElNav(null);
  };

  const handleCloseUserMenu = () => {
    setAnchorElUser(null);
  };

  return (
    <AppBar position="static">
      <Container maxWidth="xl">
        <Toolbar disableGutters>
          <AddAPhotoIcon sx={{ display: { xs: 'none', md: 'flex' }, mr: 1 }} />
          <Typography
            variant="h6"
            noWrap
            component="a"
            href="/"
            sx={{
              mr: 2,
              display: { xs: 'none', md: 'flex' },
              fontFamily: 'monospace',
              fontWeight: 700,
              letterSpacing: '.3rem',
              color: 'inherit',
              textDecoration: 'none',
            }}
          >
            PHOTO
          </Typography>

          <Box sx={{ flexGrow: 1, display: { xs: 'flex', md: 'none' } }}>
            <IconButton
              size="large"
              aria-label="account of current user"
              aria-controls="menu-appbar"
              aria-haspopup="true"
              onClick={handleOpenNavMenu}
              color="inherit"
            >
```

```
            <MenuIcon />
          </IconButton>
          <Menu
            id="menu-appbar"
            anchorEl={anchorElNav}
            anchorOrigin={{
              vertical: 'bottom',
              horizontal: 'left',
            }}
            keepMounted
            transformOrigin={{
              vertical: 'top',
              horizontal: 'left',
            }}
            open={Boolean(anchorElNav)}
            onClose={handleCloseNavMenu}
            sx={{
              display: { xs: 'block', md: 'none' },
            }}
          >
            {pages.map((page) => (
              <MenuItem key={page} onClick={handleCloseNavMenu}>
                <Typography textAlign="center">{page}</Typography>
              </MenuItem>
            ))}
          </Menu>
        </Box>
        <AddAPhotoIcon sx={{ display: { xs: 'flex', md: 'none' }, mr: 1 }} />
        <Typography
          variant="h5"
          noWrap
          component="a"
          href="/"
          sx={{
            mr: 2,
            display: { xs: 'flex', md: 'none' },
            flexGrow: 1,
            fontFamily: 'monospace',
            fontWeight: 700,
            letterSpacing: '.3rem',
            color: 'inherit',
            textDecoration: 'none',
          }}
        >
          PHOTO
        </Typography>
        <Box sx={{ flexGrow: 1, display: { xs: 'none', md: 'flex' } }}>
          {pages.map((page) => (
            <Button
              key={page}
              onClick={handleCloseNavMenu}
              sx={{ my: 2, color: 'white', display: 'block' }}
            >
              {page}
            </Button>
          ))}
        </Box>

        <Box sx={{ flexGrow: 0 }}>
          <Tooltip title="Open settings">
            <IconButton onClick={handleOpenUserMenu} sx={{ p: 0 }}>
              <Avatar alt="Remy Sharp" src="/static/images/avatar/2.jpg" />
            </IconButton>
          </Tooltip>
          <Menu
            sx={{ mt: '45px' }}
            id="menu-appbar"
            anchorEl={anchorElUser}
            anchorOrigin={{
              vertical: 'top',
              horizontal: 'right',
            }}
            keepMounted
            transformOrigin={{
              vertical: 'top',
              horizontal: 'right',
            }}
            open={Boolean(anchorElUser)}
            onClose={handleCloseUserMenu}
          >
            {settings.map((setting) => (
```

```
                  <MenuItem key={setting} onClick={handleCloseUserMenu}>
                    <Typography textAlign="center">{setting}</Typography>
                  </MenuItem>
                ))}
              </Menu>
            </Box>
          </Toolbar>
        </Container>
      </AppBar>
  );
}
export default ResponsiveAppBar;
```

Home.js

```
import * as React from 'react';
import { styled } from '@mui/material/styles';
import Box from '@mui/material/Box';
import Paper from '@mui/material/Paper';
import Grid from '@mui/material/Grid';
import Heeader from './component/header.js'
import ImageList from '@mui/material/ImageList';
import ImageListItem from '@mui/material/ImageListItem';

const Item = styled(Paper)(({ theme }) => ({
  backgroundColor: theme.palette.mode === 'dark' ? '#1A2027' : '#fff',
  ...theme.typography.body2,
  padding: theme.spacing(1),
  textAlign: 'center',
  color: theme.palette.text.secondary,
}));

export default function Home() {
  return (
    <Box sx={{ flexGrow: 1 }}>
      <Grid container spacing={2}>
        <Grid item xs={12} sm={12} md={12}>
          <Item>
            <Heeader />
          </Item>
        </Grid>
        <Grid item xs={12} sm={12} md={12}>
          <Item>
            Image Here
          </Item>
        </Grid>

        {/* item start */}
        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>


        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>


        {/* item end */}
```

```
        <Grid item xs={12} sm={12} md={12}>
          <Item> Footer</Item>
        </Grid>
      </Grid>
    </Box>
  );
```

For Image Part

Add the image list

```
import * as React from 'react';
import { styled } from '@mui/material/styles';
import Box from '@mui/material/Box';
import Paper from '@mui/material/Paper';
import Grid from '@mui/material/Grid';
import Heeader from './component/header.js'
import ImageList from '@mui/material/ImageList';
import ImageListItem from '@mui/material/ImageListItem';

const Item = styled(Paper)(({ theme }) => ({
  backgroundColor: theme.palette.mode === 'dark' ? '#1A2027' : '#fff',
  ...theme.typography.body2,
  padding: theme.spacing(1),
  textAlign: 'center',
  color: theme.palette.text.secondary,
}));

export default function Home() {
  return (
    <Box sx={{ flexGrow: 1 }}>
      <Grid container spacing={2}>
        <Grid item xs={12} sm={12} md={12}>
          <Item>
            <Heeader />
          </Item>
        </Grid>
        <Grid item xs={12} sm={12} md={12}>
          <Item>
            <ImageList sx={{  height: 450 }} cols={1} rowHeight={464}>
                <ImageListItem>
                  <img
                    src="https://images.unsplash.com/photo-1690915611188-2d6e2fc30c1f?ixlib=rb-4.0.3&ixid=M3wxMjA3fDB8MHxwaG90by1wYWdlfHx8f
                    loading="lazy"
                  />
                </ImageListItem>
            </ImageList>
          </Item>
        </Grid>

        {/* item start */}
        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>

        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>Listed Item</Item>
        </Grid>
```

```
            <Grid item xs={12} sm={6} md={3}>
              <Item>Listed Item</Item>
            </Grid>
            <Grid item xs={12} sm={6} md={3}>
              <Item>Listed Item</Item>
            </Grid>


            {/* item end */}


            <Grid item xs={12} sm={12} md={12}>
              <Item> Footer</Item>
            </Grid>
          </Grid>
        </Box>
    );
}
```

displayImg.js

```
import * as React from 'react';
import ImageList from '@mui/material/ImageList';
import ImageListItem from '@mui/material/ImageListItem';
import ImageListItemBar from '@mui/material/ImageListItemBar';


class displayImg extends React.Component {
  render() {
    return (
      <ImageList sx={{ width: 500, height: 250 }}>
          <ImageListItem >
            <img
              src="https://images.unsplash.com/photo-1551963831-b3b1ca40c98e"
              alt="Breakfast"
              loading="lazy"
            />
            <ImageListItemBar
              title="Breakfast"
              subtitle={<span>by: bkristastucchio</span>}
              position="below"
            />


          </ImageListItem>
      </ImageList>
    );
  }
}

export default displayImg;
```

home.js

```
import * as React from 'react';
import { styled } from '@mui/material/styles';
import Box from '@mui/material/Box';
import Paper from '@mui/material/Paper';
import Grid from '@mui/material/Grid';
import ImageList from '@mui/material/ImageList';
import ImageListItem from '@mui/material/ImageListItem';

import Heeader from './component/header.js'
import DisplayImg from './component/displayImg.js'

const Item = styled(Paper)(({ theme }) => ({
  backgroundColor: theme.palette.mode === 'dark' ? '#1A2027' : '#fff',
  ...theme.typography.body2,
  padding: theme.spacing(1),
```

```
  textAlign: 'center',
  color: theme.palette.text.secondary,
}));

export default function Home() {
  return (
    <Box sx={{ flexGrow: 1 }}>
      <Grid container spacing={2}>
        <Grid item xs={12} sm={12} md={12}>
          <Item>
            <Heeader />
          </Item>
        </Grid>
        <Grid item xs={12} sm={12} md={12}>
          <Item>
            <ImageList sx={{  height: 450 }} cols={1} rowHeight={464}>
                <ImageListItem>
                  <img
                    src="https://images.unsplash.com/photo-1690915611188-2d6e2fc30c1f?ixlib=rb-4.0.3&ixid=M3wxMjA3fDB8MHxwaG90by1wYWdlfHx8f
                    loading="lazy"
                  />
                </ImageListItem>
            </ImageList>
          </Item>
        </Grid>

        {/* item start */}
        <Grid item xs={12} sm={6} md={3}>
          <Item>
            <DisplayImg />
          </Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>
            <DisplayImg />
          </Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>
            <DisplayImg />
          </Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>
            <DisplayImg />
          </Item>
        </Grid>


        <Grid item xs={12} sm={6} md={3}>
          <Item>
            <DisplayImg />
          </Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>
            <DisplayImg />
          </Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>
            <DisplayImg />
          </Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>
            <DisplayImg />
          </Item>
        </Grid>


        {/* item end */}


        <Grid item xs={12} sm={12} md={12}>
          <Item> Footer</Item>
        </Grid>
      </Grid>
    </Box>
  );
}
```

For Image Part (Transfer Value)

displayImg.js

```
import * as React from 'react';
import ImageList from '@mui/material/ImageList';
import ImageListItem from '@mui/material/ImageListItem';
import ImageListItemBar from '@mui/material/ImageListItemBar';


class displayImg extends React.Component {
  render() {
    return (
      <ImageList sx={{ width: 500, height: 250 }}>
          <ImageListItem >
            <img
              src= {this.props.link}
              alt={this.props.title}
              loading="lazy"
            />
            <ImageListItemBar
              title={this.props.title}
              subtitle={<span>by: {this.props.author}</span>}
              position="below"
            />


          </ImageListItem>
      </ImageList>
    );
  }
}

export default displayImg;
```

home.js

```
import * as React from 'react';
import { styled } from '@mui/material/styles';
import Box from '@mui/material/Box';
import Paper from '@mui/material/Paper';
import Grid from '@mui/material/Grid';
import ImageList from '@mui/material/ImageList';
import ImageListItem from '@mui/material/ImageListItem';

import Heeader from './component/header.js'
import DisplayImg from './component/displayImg.js'

const Item = styled(Paper)(({ theme }) => ({
  backgroundColor: theme.palette.mode === 'dark' ? '#1A2027' : '#fff',
  ...theme.typography.body2,
  padding: theme.spacing(1),
  textAlign: 'center',
  color: theme.palette.text.secondary,
}));


export default function Home() {
  return (
    <Box sx={{ flexGrow: 1 }}>
      <Grid container spacing={2}>
        <Grid item xs={12} sm={12} md={12}>
          <Item>
            <Heeader />
          </Item>
        </Grid>
        <Grid item xs={12} sm={12} md={12}>
          <Item>
```

```
        <ImageList sx={{  height: 450 }} cols={1} rowHeight={464}>
          <ImageListItem>
            <img
              src="https://images.unsplash.com/photo-1690915611188-2d6e2fc30c1f?ixlib=rb-4.0.3&ixid=M3wxMjA3fDB8MHxwaG90by1wYWdlfHx8fGV
              loading="lazy"
            />
          </ImageListItem>
        </ImageList>
      </Item>
    </Grid>

    {/* item start */}
    <Grid item xs={12} sm={6} md={3}>
      <Item>
        <DisplayImg
          author="bkristastucchio"
          title="Breakfast"
          link="https://images.unsplash.com/photo-1551963831-b3b1ca40c98e"
        />
      </Item>
    </Grid>
    <Grid item xs={12} sm={6} md={3}>
      <Item>
        <DisplayImg
          author="bkristastucchio"
          title="Breakfast"
          link="https://images.unsplash.com/photo-1551963831-b3b1ca40c98e"
        />
      </Item>
    </Grid>
    <Grid item xs={12} sm={6} md={3}>
      <Item>
        <DisplayImg
          author="bkristastucchio"
          title="Breakfast"
          link="https://images.unsplash.com/photo-1551963831-b3b1ca40c98e"
        />
      </Item>
    </Grid>
    <Grid item xs={12} sm={6} md={3}>
      <Item>
        <DisplayImg
          author="bkristastucchio"
          title="Breakfast"
          link="https://images.unsplash.com/photo-1551963831-b3b1ca40c98e"
        />
      </Item>
    </Grid>


    <Grid item xs={12} sm={6} md={3}>
      <Item>
        <DisplayImg
          author="bkristastucchio"
          title="Breakfast"
          link="https://images.unsplash.com/photo-1551963831-b3b1ca40c98e"
        />
      </Item>
    </Grid>
    <Grid item xs={12} sm={6} md={3}>
      <Item>
        <DisplayImg
          author="bkristastucchio"
          title="Breakfast"
          link="https://images.unsplash.com/photo-1551963831-b3b1ca40c98e"
        />
      </Item>
    </Grid>
    <Grid item xs={12} sm={6} md={3}>
      <Item>
        <DisplayImg
          author="bkristastucchio"
          title="Breakfast"
          link="https://images.unsplash.com/photo-1551963831-b3b1ca40c98e"
        />
      </Item>
    </Grid>
    <Grid item xs={12} sm={6} md={3}>
      <Item>
        <DisplayImg
          author="bkristastucchio"
```

```
              title="Breakfast"
              link="https://images.unsplash.com/photo-1551963831-b3b1ca40c98e"
            />
          </Item>
        </Grid>


        {/* item end */}


        <Grid item xs={12} sm={12} md={12}>
          <Item> Footer</Item>
        </Grid>
      </Grid>
    </Box>
  );
}
```

For Footer Part

footerInfo.js

```
import * as React from "react";
import Paper from "@mui/material/Paper";
import Divider from "@mui/material/Divider";
import MenuList from "@mui/material/MenuList";
import MenuItem from "@mui/material/MenuItem";
import Grid from '@mui/material/Grid';
import ListItemIcon from "@mui/material/ListItemIcon";
import ListItemText from "@mui/material/ListItemText";
import Check from "@mui/icons-material/Check";

export default function DenseMenu() {
    return (

        <Grid container spacing={2}>
            <Grid item xs={12} sm={12} md={12}>
                    <MenuList>
                        <MenuItem>
                            <ListItemText>Footer menu text here</ListItemText>
                        </MenuItem>
                        <MenuItem>
                            <ListItemText>Footer menu text here</ListItemText>
                        </MenuItem>
                        <Divider />
                        <MenuItem>
                            <ListItemText>Footer social media link here</ListItemText>
                        </MenuItem>
                        <MenuItem>
                            <ListItemText>Footer social media link here</ListItemText>
                        </MenuItem>
                    </MenuList>
            </Grid>
        </Grid>

    );
}
```

home.js

```
import * as React from 'react';
import { styled } from '@mui/material/styles';
import Box from '@mui/material/Box';
import Paper from '@mui/material/Paper';
import Grid from '@mui/material/Grid';
import ImageList from '@mui/material/ImageList';
import ImageListItem from '@mui/material/ImageListItem';
import Divider from "@mui/material/Divider";
```

```
import Heeader from './component/header.js'
import DisplayImg from './component/displayImg.js'
import FooterInfo from './component/footerInfo.js'


const Item = styled(Paper)(({ theme }) => ({
  backgroundColor: theme.palette.mode === 'dark' ? '#1A2027' : '#fff',
  ...theme.typography.body2,
  padding: theme.spacing(1),
  textAlign: 'center',
  color: theme.palette.text.secondary,
}));


export default function Home() {
  return (
    <Box sx={{ flexGrow: 1 }}>
      <Grid container spacing={2}>
        <Grid item xs={12} sm={12} md={12}>
          <Item>
            <Heeader />
          </Item>
        </Grid>
        <Grid item xs={12} sm={12} md={12}>
          <Item>
            <ImageList sx={{  height: 450 }} cols={1} rowHeight={464}>
                <ImageListItem>
                  <img
                    src="https://images.unsplash.com/photo-1690915611188-2d6e2fc30c1f?ixlib=rb-4.0.3&ixid=M3wxMjA3fDB8MHxwaG90by1wYWdlfHx8f
                    loading="lazy"
                  />
                </ImageListItem>
            </ImageList>
          </Item>
        </Grid>

        {/* item start */}
        <Grid item xs={12} sm={6} md={3}>
          <Item>
            <DisplayImg
              author="bkristastucchio"
              title="Breakfast"
              link="https://images.unsplash.com/photo-1551963831-b3b1ca40c98e"
            />
          </Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>
            <DisplayImg
              author="bkristastucchio"
              title="Breakfast"
              link="https://images.unsplash.com/photo-1551963831-b3b1ca40c98e"
            />
          </Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>
            <DisplayImg
              author="bkristastucchio"
              title="Breakfast"
              link="https://images.unsplash.com/photo-1551963831-b3b1ca40c98e"
            />
          </Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>
            <DisplayImg
              author="bkristastucchio"
              title="Breakfast"
              link="https://images.unsplash.com/photo-1551963831-b3b1ca40c98e"
            />
          </Item>
        </Grid>

        <Grid item xs={12} sm={6} md={3}>
          <Item>
            <DisplayImg
              author="bkristastucchio"
              title="Breakfast"
```

```
              link="https://images.unsplash.com/photo-1551963831-b3b1ca40c98e"
            />
          </Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>
            <DisplayImg
              author="bkristastucchio"
              title="Breakfast"
              link="https://images.unsplash.com/photo-1551963831-b3b1ca40c98e"
            />
          </Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>
            <DisplayImg
              author="bkristastucchio"
              title="Breakfast"
              link="https://images.unsplash.com/photo-1551963831-b3b1ca40c98e"
            />
          </Item>
        </Grid>
        <Grid item xs={12} sm={6} md={3}>
          <Item>
            <DisplayImg
              author="bkristastucchio"
              title="Breakfast"
              link="https://images.unsplash.com/photo-1551963831-b3b1ca40c98e"
            />
          </Item>
        </Grid>


        {/* item end */}
        <Divider />


        <Grid item xs={12} sm={12} md={12}>
          <Item>
            <FooterInfo />
          </Item>
        </Grid>
      </Grid>
    </Box>
  );
}
```

For D3.js Part

`npm install d3`

barchart

```
import React, { Component } from 'react'
import * as d3 from 'd3'

class BarChart extends Component {
    componentDidMount() {
        this.drawChart();
    }
    drawChart() {
        const data = [12, 5, 6, 6, 9, 10];

        const svg = d3.select("body")
                    .append("svg")
                    .attr("width", 700)
                    .attr("height", 300);

        svg.selectAll("rect")
            .data(data)
            .enter()
            .append("rect")
```

```
                .attr("x", (d, i) => i * 70)
                .attr("y", (d, i) => 300 - 10 * d)
                .attr("width", 65)
                .attr("height", (d, i) => d * 10)
                .attr("fill", "green");
        }
        render() {
            return <div id={"#" + this.props.id}></div>
        }
}
export default BarChart;
```