

Implementation

Part-1

1. Create API
 1. Use JSON file which contains various products details such as product_id, product_name, product_type, product_image, product_quantity, product_cost and description.
 2. Create 5 products sets in JSON.
2. Display all product information on console and also on client browser. [Create server first]
3. Define following routes to access page.
 1. localhost/ [Bydefault display default page as below]
 2. localhost/default
 3. localhost/api
 4. localhost/product
 5. localhost/product?id=0 [By default]
 6. localhost/anyother then display page not found with status code.

Part-2 [HTML template/placeholder] - Define placeholder and replace by the content dynamically

1. Create HTML templates for 1. Default page 2. Product page and 3. CardInfo page
 1. Default page: Display products information from JSON such as ID, Name, Type and Price in different cards/sections [You may use DIV/FIGURE]
 2. Default page contain tag like **20% Discount** on some specific products.
 3. Default page contain link like **more details to** view individual product information [Display remaining info from JSON]
 4. All the individual product with respective cards should be accessible using URI like localhost/product?id=0 and so on.
 5. Use proper CSS style or any bootstrap theme.
2. Upload Instruction: PDF file with code and screenshots of each output.

DATA JSON

```
[
  {
    "id": 0,
```

```
    "name": "car",
    "type": "sedan",
    "image": "🚗",
    "quantity": "1 🚗",
    "cost": "5 lacs",
    "petrol": true,
    "description": "hello i am sedan",
    "from": "India"
  },
  {
    "id": 1,
    "name": "Sports car",
    "type": "Racing",
    "image": "🏎️",
    "quantity": "1 🏎️",
    "cost": "7 lacs",
    "petrol": false,
    "description": "This is a sports car",
    "from": "Germany"
  },
  {
    "id": 2,
    "name": "Police",
    "type": "Police car",
    "image": "🚔",
    "quantity": "1 🚔",
    "cost": "8 lacs",
    "petrol": true,
    "description": "This is police vehicle",
    "from": "USA"
  },
  {
    "id": 3,
    "name": "Fancy",
    "type": "Fancy car",
    "image": "🚙",
    "quantity": "1 🚙",
    "cost": "10 lacs",
    "petrol": false,
    "description": "This is fancy car",
    "FROM": "LONDON"
  },
  {
    "id": 4,
    "name": "SUV",
    "type": "Heavy Car",
    "from": "Austria",
```

```
    "image": "🚗",
    "quantity": "1 🚗",
    "cost": "12 lacs",
    "petrol": true,
    "description": "This is sport utility vehicle"
  }
]
```

Index.json

```
const fs = require('fs');
const http = require('http');
const url = require('url');

const replaceTemplate = (temp, product) => {
  let output = temp.replace(/{%NAME%}/g, product.name);
  output = output.replace(/{%IMAGE%}/g, product.image);
  output = output.replace(/{%cost%}/g, product.cost);
  output = output.replace(/{%price%}/g, product.price);
  output = output.replace(/{%FROM%}/g, product.from);
  output = output.replace(/{%NUTRIENTS%}/g, product.nutrients);
  output = output.replace(/{%QUANTITY%}/g, product.quantity);
  output = output.replace(/{%DESCRIPTION%}/g, product.description);
  output = output.replace(/{%ID%}/g, product.id);

  if(!product.petrol) output = output.replace(/{%NOT_petrol%}/g, 'not-
petrol');
  return output;
}

const tempOverview = fs.readFileSync(`${__dirname}/final/templates/template-
overview.html`, 'utf-8');
const tempCard = fs.readFileSync(`${__dirname}/final/templates/template-
card.html`, 'utf-8');
const tempProduct = fs.readFileSync(`${__dirname}/final/templates/template-
product.html`, 'utf-8');

const data = fs.readFileSync(`${__dirname}/final/dev-data/data.json`, 'utf-
8');
const dataObj = JSON.parse(data);

//Create Server
const server = http.createServer((req, res) => {
  //res.end('hello from the server');
```

```
//console.log(req.url);
//console.log(url.parse(req.url, true));
const { query, pathname } = url.parse(req.url, true);

//const pathName = req.url;

// Overview page
if(pathname === '/' || pathname === '/overview'){
  //res.end('This is OVERVIEW');
  res.writeHead(200, { 'Content-type': 'text/html'})

  const cardsHtml = dataObj.map(el => replaceTemplate(tempCard, el));
  //console.log(cardsHtml);
  const output = tempOverview.replace('{%PRODUCT_CARDS%}', cardsHtml);
  //res.end(tempOverview);
  res.end(output);

  // Product page
} else if (pathname === '/product'){
  res.writeHead(200, { 'Content-type': 'text/html'});
  const product = dataObj[query.id];
  const output = replaceTemplate(tempProduct, product);
  //console.log(query);
  //res.end('This is the Product!');
  res.end(output);

  // API page
}else if(pathname === '/api'){
  res.writeHead(200, { 'Content-type': 'application/json' })
  res.end(data);

  // Not found
}else{
  res.writeHead(404,{
    'Content-type': 'text/html',
    'my-own-header': 'hello-world'
  });
  res.end('<h1>Page not found!</h1>');
}
});

// Server Listening
server.listen(8000, '127.0.0.1', ()=>{
  console.log('Listening request on port 8000');
});
```

Template-card.html

```

<figure class="card">
  <div class="card__emoji">{%IMAGE%}{%IMAGE%}</div>
  <div class="card__title-box">
    <h2 class="card__title">{%NAME%}</h2>
  </div>

  <div class="card__details">
    <div class="card__detail-box {%NOT_PETROL%}">
      <h6 class="card__detail card__detail--petrol">petrol!</h6>
    </div>

    <div class="card__detail-box">
      <h6 class="card__detail">{%QUANTITY%} per 🍷</h6>
    </div>

    <div class="card__detail-box">
      <h6 class="card__detail card__detail--price">{%cost%}€</h6>
    </div>
  </div>

  <a class="card__link" href="/product?id={%ID%}">
    <span>Detail <i class="emoji-right">👉</i></span>
  </a>
</figure>

```

Template-overview.html

```

<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <meta http-equiv="X-UA-Compatible" content="ie=edge" />
    <link
      href="https://fonts.googleapis.com/css?family=Megrim|Nunito+Sans:400,900"
      rel="stylesheet"
    />
    <link
      rel="icon"

```

```
    href="https://img-
premium.flaticon.com/png/512/1048/premium/1048315.png?token=exp=1628928002~hma
c=ac3503030d95905f8e2448f444373762"
  />

<title>CAR COLLECTION</title>

<style>
  *,
  *::before,
  *::after {
    margin: 0;
    padding: 0;
    box-sizing: inherit;
  }

  html {
    font-size: 62.5%;
    box-sizing: border-box;
  }

  body {
    padding: 5rem 5rem 10rem;
    line-height: 1.7;
    font-family: 'Nunito Sans', sans-serif;
    color: #555;
    min-height: 100vh;
    background: linear-
gradient(to bottom right, rgb(49, 4, 253), #56bafc);
  }

  h1 {
    font-family: 'Megrim', sans-serif;
    font-size: 6rem;
    color: white;
    transform: skewY(-5deg);
    text-align: center;
    position: relative;
    word-spacing: 3px;
  }

  h1::before {
    content: '';
    display: block;
    height: 65%;
    width: 49%;
    position: absolute;
    top: 105%;
```

```
    left: 50%;
    background: linear-gradient(to bottom, #0bcdfd, #2ba5f7);
    opacity: 0.8;
    z-index: -1;
    transform: skewY(370deg) translate(-50%, -50%);
  }

  .container {
    width: 95rem;
    margin: 0 auto;
  }

  .cards-container {
    margin-top: 8rem;
  }

  .card {
    background: white;
    box-shadow: 0 2rem 6rem 1rem rgba(0, 0, 0, 0.15);
    margin-bottom: 5rem;
    transform: skewX(-20deg);
    display: flex;
    transition: all 0.5s;
  }

  .card__emoji {
    font-size: 5.5rem;
    line-height: 1.2;
    padding: 1.5rem 6rem 0.5rem 1.5rem;
    letter-spacing: -4rem;
    transform: skewX(20deg);
  }

  .card__title-box {
    background: linear-gradient(to bottom, #0bcdfd, #2b8af7);
    margin-right: auto;
    display: flex;
    align-items: center;
    padding: 0 3rem;
  }

  .card__title {
    font-family: 'Megrim', sans-serif;
    color: white;
    font-size: 3.25rem;
    transform: skewX(20deg);
  }
```

```
.card__details {
  display: flex;
}

.card__detail-box {
  align-self: stretch;
  border-right: 1px solid #ddd;
  display: flex;
  align-items: center;
}

.card__detail-box:last-child {
  border: none;
}

.card__detail {
  font-weight: 400;
  font-size: 1.8rem;
  transform: skewX(20deg);
  padding: 1.75rem;
}

.card__detail--petrol {
  font-weight: 900;
  text-transform: uppercase;
  font-size: 1.9rem;
  background-image: linear-gradient(to right, #0bcdfd, #2b8af7);
  -webkit-background-clip: text;
  background-clip: text;
  color: transparent;
}

.card__detail--price {
  font-weight: 900;
  font-size: 1.9rem;
}

.card__link:link,
.card__link:visited {
  flex: 0 0 auto;
  background-color: #79e17b;
  color: white;
  font-size: 1.6rem;
  font-weight: 900;
  text-transform: uppercase;
  text-decoration: none;
  padding: 2.5rem;
  text-align: center;
}
```



```
    display: flex;
    align-items: center;
    justify-content: center;
    transition: all 0.3s;
  }

  .card__link:hover,
  .card__link:active {
    background-color: #9be15d;
  }

  .card__link span {
    transform: skewX(20deg);
  }

  .card:hover {
    transform: skewX(-20deg) scale(1.08);
    box-shadow: 0 3rem 8rem 2rem rgba(0, 0, 0, 0.15);
  }

  .emoji-left {
    font-size: 2rem;
    margin-right: 1rem;
  }

  .emoji-right {
    font-size: 2rem;
    margin-left: 1rem;
  }

  .not-petrol {
    display: none;
  }
</style>
</head>

<body>
  <div class="container">
    <h1> CAR COLLECTION </h1>

    <div class="cards-container">
      {%PRODUCT_CARDS%}
    </div>
  </div>
</body>
</html>
```

Template-product.html

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <meta http-equiv="X-UA-Compatible" content="ie=edge" />
    <link
      href="https://fonts.googleapis.com/css?family=Megrim|Nunito+Sans:400,900"
      rel="stylesheet"
    />
    <link
      rel="icon"
      href="https://emojipedia-us.s3.dualstack.us-west-1.amazonaws.com/thumbs/240/apple/155/ear-of-maize_1f33d.png"
    />

    <title>{%NAME%} {%IMAGE%} /// CAR COLLECTION</title>

    <style>
      *,
      *::before,
      *::after {
        margin: 0;
        padding: 0;
        box-sizing: inherit;
      }

      html {
        font-size: 62.5%;
        box-sizing: border-box;
      }

      body {
        padding: 5rem 5rem 10rem;
        line-height: 1.7;
        font-family: 'Nunito Sans', sans-serif;
        color: #555;
        min-height: 100vh;
        background: linear-gradient(to bottom right, #0bcdfd, #2b8af7);
      }

      h1 {
        font-family: 'Megrim', sans-serif;
```

```
    font-size: 6rem;
    color: white;
    transform: skewY(-5deg);
    text-align: center;
    position: relative;
    word-spacing: 3px;
  }

  h1::before {
    content: '';
    display: block;
    height: 65%;
    width: 49%;
    position: absolute;
    top: 105%;
    left: 50%;
    background: linear-gradient(to bottom, #0bcdfd, #2b8af7);
    opacity: 0.8;
    z-index: -1;
    transform: skewY(370deg) translate(-50%, -50%);
  }

  .container {
    width: 95rem;
    margin: 0 auto;
  }

  .product {
    width: 60rem;
    margin: 0 auto;
    margin-top: 9rem;
    background: white;
    box-shadow: 0 3rem 6rem 1rem rgba(0, 0, 0, 0.2);
    position: relative;
  }

  .product__hero {
    position: relative;
    height: 22rem;
    overflow: hidden;
  }

  .product__hero::before {
    content: '';
    display: block;
    height: 100%;
    width: 100%;
    position: absolute;
```

```
    top: 0;
    left: 0;
    background-image: linear-gradient(to left bottom, #0bcdfd, #2b8af7);
    opacity: 0.5;
    z-index: 100;
  }

  .product__emoji {
    font-size: 15rem;
    position: absolute;
  }

  .product__emoji--1 {
    top: -4rem;
    left: -2rem;
    z-index: 10;
  }

  .product__emoji--2 {
    top: -6rem;
    left: 9rem;
  }

  .product__emoji--3 {
    top: -4rem;
    right: 15rem;
  }

  .product__emoji--4 {
    top: -5rem;
    right: 2rem;
    z-index: 10;
  }

  .product__emoji--5 {
    bottom: -9rem;
    left: 18rem;
  }

  .product__emoji--6 {
    bottom: -8rem;
    left: 5rem;
  }

  .product__emoji--7 {
    bottom: -12rem;
    right: 14rem;
  }
```

```
.product__emoji--8 {
  bottom: -8rem;
  right: -2rem;
}

.product__emoji--9 {
  top: -7rem;
  left: 19rem;
}

.product__petrol {
  position: absolute;
  top: -4rem;
  right: -4rem;
  z-index: 1000;
  height: 11rem;
  width: 11rem;
  background-image: linear-gradient(to bottom, #0bcdfd, #2b8af7);
  border-radius: 50%;
  transform: rotate(15deg);
  box-shadow: 0 2rem 4rem rgba(0, 0, 0, 0.4);
  display: flex;
  align-items: center;
  justify-content: center;
}

.product__petrol h5 {
  font-weight: 900;
  text-transform: uppercase;
  font-size: 1.8rem;
  color: white;
}

.product__back:link,
.product__back:visited {
  position: absolute;
  top: 2rem;
  left: 2rem;
  font-size: 1.5rem;
  font-weight: 700;
  text-transform: uppercase;
  text-decoration: none;
  z-index: 1000;
  color: #555;
  background-color: white;
  box-shadow: 0 1rem 3rem rgba(0, 0, 0, 0.3);
  border-radius: 100rem;
```

```
padding: 0 2rem;
transition: all 0.3s;
display: flex;
align-items: center;
}

.product__back:hover,
.product__back:active {
  background-color: #79e17b;
}

.product__name {
  background: linear-gradient(to bottom, #0bcdfd, #2b8af7);
  padding: 1rem;
  font-family: 'Megrim', sans-serif;
  font-size: 4rem;
  color: white;
  text-align: center;
  word-spacing: 2px;
}

.product__details {
  background-color: #eee;
  padding: 4rem 6rem;
  font-size: 1.9rem;
  display: grid;
  grid-template-columns: 1fr 1fr;
  grid-gap: 1.5rem;
}

.product__description {
  padding: 5rem 6rem;
  font-size: 1.6rem;
  line-height: 1.8;
}

.product__link:link,
.product__link:visited {
  display: block;
  background-color: #79e17b;
  color: white;
  font-size: 1.6rem;
  font-weight: 700;
  text-transform: uppercase;
  text-decoration: none;
  padding: 1.5rem;
  text-align: center;
  transform: scale(1.07) skewX(-20deg);
```

```

    box-shadow: 0 2rem 6rem rgba(0, 0, 0, 0.2);
    display: flex;
    align-items: center;
    justify-content: center;
    transition: all 0.3s;
  }

  .product__link:hover,
  .product__link:active {
    background-color: #9be15d;
    transform: scale(1.1) skewX(-20deg);
  }

  .product__link span {
    transform: skewX(20deg);
  }

  .emoji-left {
    font-size: 2rem;
    margin-right: 1rem;
  }

  .emoji-right {
    font-size: 2rem;
    margin-left: 1rem;
  }

  .not-petrol {
    display: none;
  }
</style>
</head>

<body>
  <div class="container">
    <h1> CAR COLLECTION </h1>

    <figure class="product">
      <div class="product__petrol {%NOT_PETROL%}"><h5>petrol</h5></div>
      <a href="/overview" class="product__back">
        <span class="emoji-left">🏠</span><span>Back
      </a>
      <div class="product__hero">
        <span class="product__emoji product__emoji--1">{%IMAGE%}</span>
        <span class="product__emoji product__emoji--2">{%IMAGE%}</span>
        <span class="product__emoji product__emoji--3">{%IMAGE%}</span>
        <span class="product__emoji product__emoji--4">{%IMAGE%}</span>
        <span class="product__emoji product__emoji--5">{%IMAGE%}</span>

```

```

    <span class="product__emoji product__emoji--6">{%IMAGE%}</span>
    <span class="product__emoji product__emoji--7">{%IMAGE%}</span>
    <span class="product__emoji product__emoji--8">{%IMAGE%}</span>
    <span class="product__emoji product__emoji--9">{%IMAGE%}</span>
  </div>
  <h2 class="product__name">{%NAME%}</h2>
  <div class="product__details">
    <p><span class="emoji-left">🌐</span>From {%FROM%}</p>
    <!-- <p><span class="emoji-left">❤️</span>{%NUTRIENTS%}</p> -->
    <p><span class="emoji-left">📄</span>{%QUANTITY%}</p>
    <p><span class="emoji-left">💰</span>{%cost%}€</p>
  </div>

  <a href="#" class="product__link">
    <span class="emoji-left">🛒</span>
    <span>Add to shopping card ({%cost%}€)</span>
  </a>

  <p class="product__description">
    {%DESCRIPTION%}
  </p>
</figure>

</div>
</body>
</html>

```


OUTPUT





