

## 16. Predesign layout components

Some styles in Bootstrap are designed to help you quickly create elements for certain types of content. These are sometimes called design patterns and Bootstrap has some really useful patterns for common layout tasks. Design patterns are predefined through various components. A jumbotron, for example, is a popular way to display some content at the top of a website. Table styles are extremely useful because they make elements that are challenging to style look great without a lot of work. Card layouts are a new design pattern that is available in this version of Bootstrap.

They let you create designs that are boxed into items that look like cards. Another really useful design pattern is media elements. They're great for creating lists of items that need to have photos on one side and headlines and texts in another.

### Jumbotron

The jumbotron is a component for a highlighted section of content and it's commonly used at the top of many websites. It's really easy to do with Bootstrap and this current version has a couple of options for you.

- `jumbotron` container
- `jumbotron-fluid` items
- Use styles as needed

**Example)** Use Bootstrap to create the following header:

# Our Mission

Welcome and thank you for visiting the Engineering Technology Department at Queensborough Community College website. Whether you are a current or prospective student I am sure you will find the material on this website helpful.

```
<div class='jumbotron'>
  <div class="display-2">Our Mission</div>
  <p class="display-5">Welcome and thank you for visiting the Engineering Technology
  Department at Queensborough Community College website. Whether you are a current or
  prospective student I am sure you will find the material on this website helpful.</p>
</div>
```

## Cards

Cards are a new design element in Bootstrap 4 and it can help you lay out your content into card-like containers that look great and have as a small outline around them. There are a ton of options in terms of the classes that you can use.

You can modify the card content:

- card-text
- card-title
- card-subtitle
- card-link
- card-img

**Example)** Use Bootstrap to create the following card:



### New York City

#### The Big Apple

Situated on one of the world's largest natural harbors, New York City consists of five boroughs, each of which is a separate county of the State of New York. The five boroughs – Brooklyn, Queens, Manhattan, The Bronx, and Staten Island – were consolidated into a single city in 1898.

[NYC The Official Guide](#)

[The Official Website of the City of New York](#)

```

<div class="card col-md-6">
  <div class='card-body'> <!-- add a container to card elements -->
    
    <h2 class='card-title'>New York City</h2>
    <h5 class='card-subtitle'>The Big Apple</h5>
    <p class='card-text'>Situated on one of the world's largest natural harbors,
    New York City consists of five boroughs, each of which is a separate county
    of the State of New York. The five boroughs – Brooklyn, Queens, Manhattan,
    The Bronx, and Staten Island – were consolidated into a single city in
    1898.</p>
    <a class='card-link' href="https://www.nycgo.com/">NYC The Official Guide</a>
    <br>
    <a class='card-link' href="https://www1.nyc.gov/">The Official Website of the
    City of New York</a>
  </div>
</div>

```

You can also add colors

**bg-COLOR** for backgrounds

primary secondary success danger warning info light dark white

**border-COLOR** for outlines

primary secondary success danger warning info light dark

**text-COLOR** for text

primary secondary success danger warning info light dark

### Card content classes

The basic container should have a card class, and we should at least have an element that has a card body as a container of some of the content in your cards.

You can create a card header and footer by using classes card-header and card-footer.

**Example)** Add the card-header and card-footer to the previous card

## New York City

The Big Apple



Situated on one of the world's largest natural harbors, New York City consists of five boroughs, each of which is a separate county of the State of New York. The five boroughs – Brooklyn, Queens, Manhattan, The Bronx, and Staten Island – were consolidated into a single city in 1898.

[NYC The Official Guide](#)

[The Official Website of the City of New York](#)

HTML

```
<div class="card col-md-6">
  <div class="card-header"> <!-- card header-->
    <h2 class='card-title'>New York City</h2>
    <h5 class='card-subtitle'>The Big Apple</h5>
  </div>
  <div class='card-body'> <!-- add a container to card elements -->
    
    <p class='card-text'>Situated on one of the world's largest natural harbors,
    New York City consists of five boroughs, each of which is a separate county
    of the State of New York. The five boroughs – Brooklyn, Queens, Manhattan,
    The Bronx, and Staten Island – were consolidated into a single city in
    1898.</p>
  </div>

  <div class="card-footer">
    <a class='card-link' href="https://www.nycgo.com/">NYC The Official Guide</a>
    <br>
    <a class='card-link' href="https://www1.nyc.gov/">The Official Website of the
    City of New York</a>
  </div>
</div>
```

## List in a card

Normal **list-group** container class that will go around the elements, and then inside that, each of the items that is part of the list gets a **list-group-item**. Finally there is a class called **list-group-flush**. It allows you to take the content that is in the list group, and extend it to the edge of the card.

**Example)** Using the previous card, add a list to the hyperlinks.



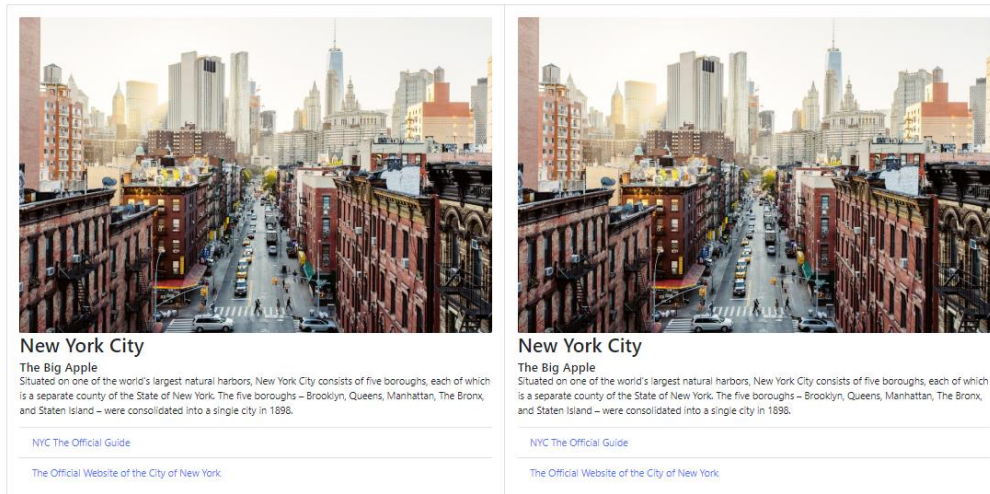
```
<div class="card col-md-6">
  <div class='card-body'>
    
    <h2 class='card-title'>New York City</h2>
    <h5 class='card-subtitle'>The Big Apple</h5>
    <p class='card-text'>Situated on one of the world's largest natural harbors,
    New York City consists of five boroughs, each of which is a separate county
    of the State of New York. The five boroughs – Brooklyn, Queens, Manhattan,
    The Bronx, and Staten Island – were consolidated into a single city in
    1898.</p>
    <div class='list-group list-group-flush'>
      <a class='list-group-item' href="https://www.nycgo.com/">NYC The Official
      Guide</a>
      <a class='list-group-item' href="https://www1.nyc.gov/">The Official
      Website of the City of New York</a>
    </div>
  </div>
</div>
```

HTML

## Card layout

So, let's take a look at how we control the layout of different cards. And what you do in Bootstrap is you create a container that is going to have a number of cards in it and that container should get some classes. And the first one I'll talk about is called **card-group**. **card-group** will place the cards side by side, and they will have a shared order.

**Example)** Group two of the previous cards into one row using **card-group**



HTML

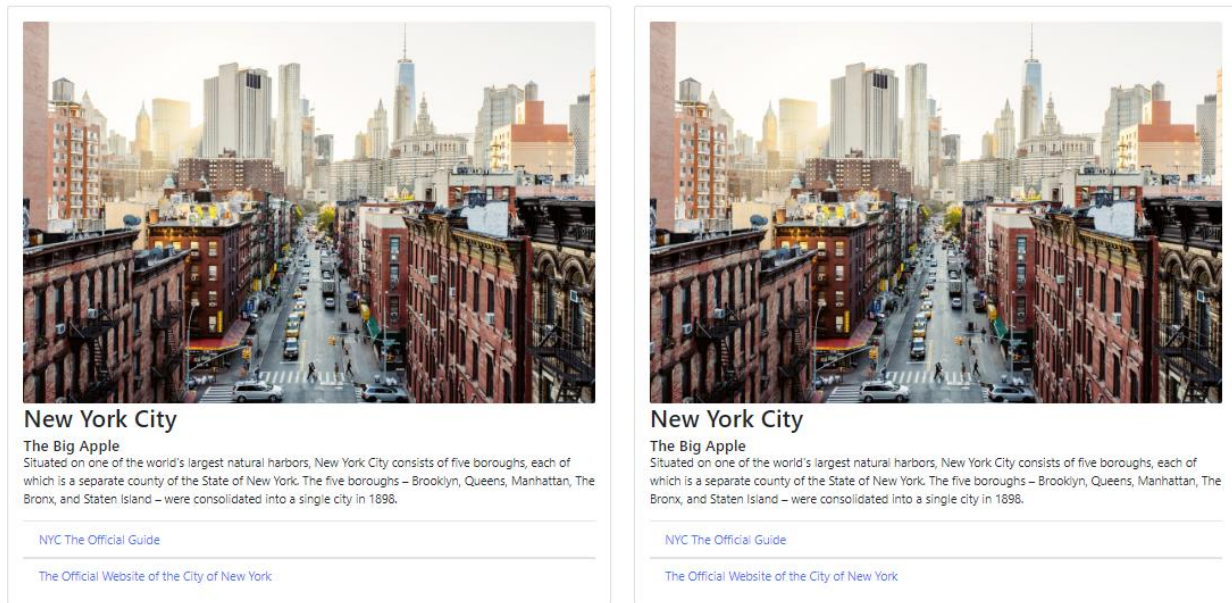
```
<div class="card-group">
  <div class='card card-body'>
    
    <h2 class='card-title'>New York City</h2>
    <h5 class='card-subtitle'>The Big Apple</h5>
    <p class='card-text'>Situating on one of the world's largest natural harbors, New York
    City consists of five boroughs, each of which is a separate county of the State of New
    York. The five boroughs - Brooklyn, Queens, Manhattan, The Bronx, and Staten Island -
    were consolidated into a single city in 1898.</p>
    <div class='list-group list-group-flush'>
      <a class='list-group-item' href="https://www.nycgo.com/">NYC The Official Guide</a>
      <a class='list-group-item' href="https://www1.nyc.gov/">The Official Website of the
      City of New York</a>
    </div>
  </div><!-- end of card-->

  <div class='card card-body'>
    
    <h2 class='card-title'>New York City</h2>
    <h5 class='card-subtitle'>The Big Apple</h5>
    <p class='card-text'>Situating on one of the world's largest natural harbors, New York
    City consists of five boroughs, each of which is a separate county of the State of New
    York. The five boroughs - Brooklyn, Queens, Manhattan, The Bronx, and Staten Island -
    were consolidated into a single city in 1898.</p>
    <div class='list-group list-group-flush'>
      <a class='list-group-item' href="https://www.nycgo.com/">NYC The Official Guide</a>
      <a class='list-group-item' href="https://www1.nyc.gov/">The Official Website of the
      City of New York</a>
    </div>
  </div><!-- end of card-->
</div><!-- end-card-group -->
```



If you don't want a shared order, you can use **card-deck**. It's pretty much the same thing as **card-group**, puts everything side by side, but it does have a little of a spacing in between the cards.

**Example)** Group two of the previous cards into one row using **card-deck**









```
<div class="card-deck">
  <div class='card card-body'>
    
    <h2 class='card-title'>New York City</h2>
    <h5 class='card-subtitle'>The Big Apple</h5>
    <p class='card-text'>Situated on one of the world's largest natural harbors, New York
    City consists of five boroughs, each of which is a separate county of the State of New
    York. The five boroughs – Brooklyn, Queens, Manhattan, The Bronx, and Staten Island –
    were consolidated into a single city in 1898.</p>
    <div class='list-group list-group-flush'>
      <a class='list-group-item' href="https://www.nycgo.com/">NYC The Official Guide</a>
      <a class='list-group-item' href="https://www1.nyc.gov/">The Official Website of the
      City of New York</a>
    </div>
  </div><!-- end of card-->

  <div class='card card-body'>
    
    <h2 class='card-title'>New York City</h2>
    <h5 class='card-subtitle'>The Big Apple</h5>
    <p class='card-text'>Situated on one of the world's largest natural harbors, New York
    City consists of five boroughs, each of which is a separate county of the State of New
    York. The five boroughs – Brooklyn, Queens, Manhattan, The Bronx, and Staten Island –
    were consolidated into a single city in 1898.</p>
    <div class='list-group list-group-flush'>
      <a class='list-group-item' href="https://www.nycgo.com/">NYC The Official Guide</a>
      <a class='list-group-item' href="https://www1.nyc.gov/">The Official Website of the
      City of New York</a>
    </div>
  </div><!-- end of card-->
</div><!-- end-card-deck -->
```

HTML

Use can also use traditional **row** and **col**

**Example)** Group three of the previous cards into one row using **row** and **col**

 <h3>New York City</h3> <h4>The Big Apple</h4> <p>Situated on one of the world's largest natural harbors, New York City consists of five boroughs, each of which is a separate county of the State of New York. The five boroughs – Brooklyn, Queens, Manhattan, The Bronx, and Staten Island – were consolidated into a single city in 1898.</p> <hr/> <p><a href="#">NYC The Official Guide</a></p> <hr/> <p><a href="#">The Official Website of the City of New York</a></p>	 <h3>New York City</h3> <h4>The Big Apple</h4> <p>Situated on one of the world's largest natural harbors, New York City consists of five boroughs, each of which is a separate county of the State of New York. The five boroughs – Brooklyn, Queens, Manhattan, The Bronx, and Staten Island – were consolidated into a single city in 1898.</p> <hr/> <p><a href="#">NYC The Official Guide</a></p> <hr/> <p><a href="#">The Official Website of the City of New York</a></p>	 <h3>New York City</h3> <h4>The Big Apple</h4> <p>Situated on one of the world's largest natural harbors, New York City consists of five boroughs, each of which is a separate county of the State of New York. The five boroughs – Brooklyn, Queens, Manhattan, The Bronx, and Staten Island – were consolidated into a single city in 1898.</p> <hr/> <p><a href="#">NYC The Official Guide</a></p> <hr/> <p><a href="#">The Official Website of the City of New York</a></p>
 <h3>New York City</h3> <h4>The Big Apple</h4> <p>Situated on one of the world's largest natural harbors, New York City consists of five boroughs, each of which is a separate county of the State of New York. The five boroughs – Brooklyn, Queens, Manhattan, The Bronx, and Staten Island – were consolidated into a single city in 1898.</p> <hr/> <p><a href="#">NYC The Official Guide</a></p> <hr/> <p><a href="#">The Official Website of the City of New York</a></p>	 <h3>New York City</h3> <h4>The Big Apple</h4> <p>Situated on one of the world's largest natural harbors, New York City consists of five boroughs, each of which is a separate county of the State of New York. The five boroughs – Brooklyn, Queens, Manhattan, The Bronx, and Staten Island – were consolidated into a single city in 1898.</p> <hr/> <p><a href="#">NYC The Official Guide</a></p> <hr/> <p><a href="#">The Official Website of the City of New York</a></p>	 <h3>New York City</h3> <h4>The Big Apple</h4> <p>Situated on one of the world's largest natural harbors, New York City consists of five boroughs, each of which is a separate county of the State of New York. The five boroughs – Brooklyn, Queens, Manhattan, The Bronx, and Staten Island – were consolidated into a single city in 1898.</p> <hr/> <p><a href="#">NYC The Official Guide</a></p> <hr/> <p><a href="#">The Official Website of the City of New York</a></p>



```

<div class="container">
  <div class="row rowCard"><!-- FIRST ROW-->
    <div class="col-md-4">
      <div class='card card-body'>
        
        <h2 class='card-title'>New York City</h2>
        <h5 class='card-subtitle'>The Big Apple</h5>
        <p class='card-text'>Situated on one of the world's largest natural
        harbors, New York City consists of five boroughs, each of which is a
        separate county of the State of New York. The five boroughs – Brooklyn,
        Queens, Manhattan, The Bronx, and Staten Island – were consolidated into a
        single city in 1898.</p>
        <div class='list-group list-group-flush'>
          <a class='list-group-item' href="https://www.nycgo.com/">NYC The
          Official Guide</a>
          <a class='list-group-item' href="https://www1.nyc.gov/">The Official
          Website of the City of New York</a>
        </div>
      </div><!-- end of card-->
    </div><!-- end of col-->

    <div class="col-md-4">
      <div class='card card-body'>
        
        <h2 class='card-title'>New York City</h2>
        <h5 class='card-subtitle'>The Big Apple</h5>
        <p class='card-text'>Situated on one of the world's largest natural
        harbors, New York City consists of five boroughs, each of which is a
        separate county of the State of New York. The five boroughs – Brooklyn,
        Queens, Manhattan, The Bronx, and Staten Island – were consolidated into a
        single city in 1898.</p>
        <div class='list-group list-group-flush'>
          <a class='list-group-item' href="https://www.nycgo.com/">NYC The
          Official Guide</a>
          <a class='list-group-item' href="https://www1.nyc.gov/">The Official
          Website of the City of New York</a>
        </div>
      </div><!-- end of card-->
    </div><!-- end of col-->

    <div class="col-md-4">
      <div class='card card-body'>
        
        <h2 class='card-title'>New York City</h2>
        <h5 class='card-subtitle'>The Big Apple</h5>
        <p class='card-text'>Situated on one of the world's largest natural
        harbors, New York City consists of five boroughs, each of which is a
        separate county of the State of New York. The five boroughs – Brooklyn,
        Queens, Manhattan, The Bronx, and Staten Island – were consolidated into a
        single city in 1898.</p>
        <div class='list-group list-group-flush'>
          <a class='list-group-item' href="https://www.nycgo.com/">NYC The
          Official Guide</a>
          <a class='list-group-item' href="https://www1.nyc.gov/">The Official
          Website of the City of New York</a>
        </div>
      </div><!-- end of card-->
    </div><!-- end of col-->
  </div><!-- end FIRST ROW -->

```