**How can we implement pagination**

We do this by adding some controls which always leads to the same path but then we add a query parameter which allows us to specify optional data like page=1 which we change using the controls we added.

<section class="pagination">

    <a href="/?page=1">1</a>

    <a href="/?page=2">2</a>

</section>

**Retrieving a chunk of data**

exports.getIndex = (req, res, next) => {

  const ITEMS\_PER\_PAGE = 2; ---->

  const page = req.query.page; ---->

  Product.find()

    .skip((page - 1) \* ITEMS\_PER\_PAGE) ---->

    .limit(ITEMS\_PER\_PAGE) ---->

    .then(products => {

      res.render('shop/index', {

        prods: products,

        pageTitle: 'Shop',

        path: '/'

      });

    })

    .catch(err => {

      ..

    });

};

**Preparing Pagination Data on server**

exports.getIndex = (req, res, next) => {

  const ITEMS\_PER\_PAGE = 2;

  const page = +req.query.page || 1;

  const totalItems;

  Product.find()

    .count()

    .then(productsCount => {

      totalItems = productsCount;

      return Product.find()

        .skip((page - 1) \* ITEMS\_PER\_PAGE)

        .limit(ITEMS\_PER\_PAGE)

    })

    .then(products => {

      res.render('shop/index', {

        prods: products,

        pageTitle: 'Shop',

        path: '/',

        currentPage: page,

        hasNextPage: ITEMS\_PER\_PAGE \* page < totalItems,

        hasPreviousPage: page > 1,

        nextPage: page + 1,

        previousPage: page - 1,

        lastPage: Math.ceil(totalItems/ITEMS\_PER\_PAGE)

      });

    })

.catch(err => {

..

    });

};

**Adding Dynamic Pagination**

<section class="pagination">

    <% if(currentPage!=1 && previousPage!=1) { %>

    <a href="/?page=1">1</a>

    <% } %>

    <% if(hasPreviousPage) { %>

    <a href="/?page=<%= previousPage %>"><%= previousPage %></a>

    <% } %>

    <a href="/?page=<%= currentPage %>" class="active"><%= currentPage %></a>

    <% if(hasNextPage) { %>

    <a href="/?page=<%= nextPage %>"><%= nextPage %></a>

    <% } %>

    <% if( lastPage!=currentPage && nextPage!=lastPage) { %>

    <a href="/?page=<%= lastPage %>"><%= lastPage %></a>

    <% } %>

</section>