

# Introduction to User Experience (UX)



## Device

PC  
Smart TV  
Game Console  
Mobile ...etc

## Application



iOS APP  
Android APP  
Desktop...etc



## Browser

Chrome  
Firefox  
Safari...etc

## Database Server

SQL (MySQL, Oracle..etc)  
noSQL (MongoDB, CouchDB ..etc)  
Graph (NeoDB)  
Files system



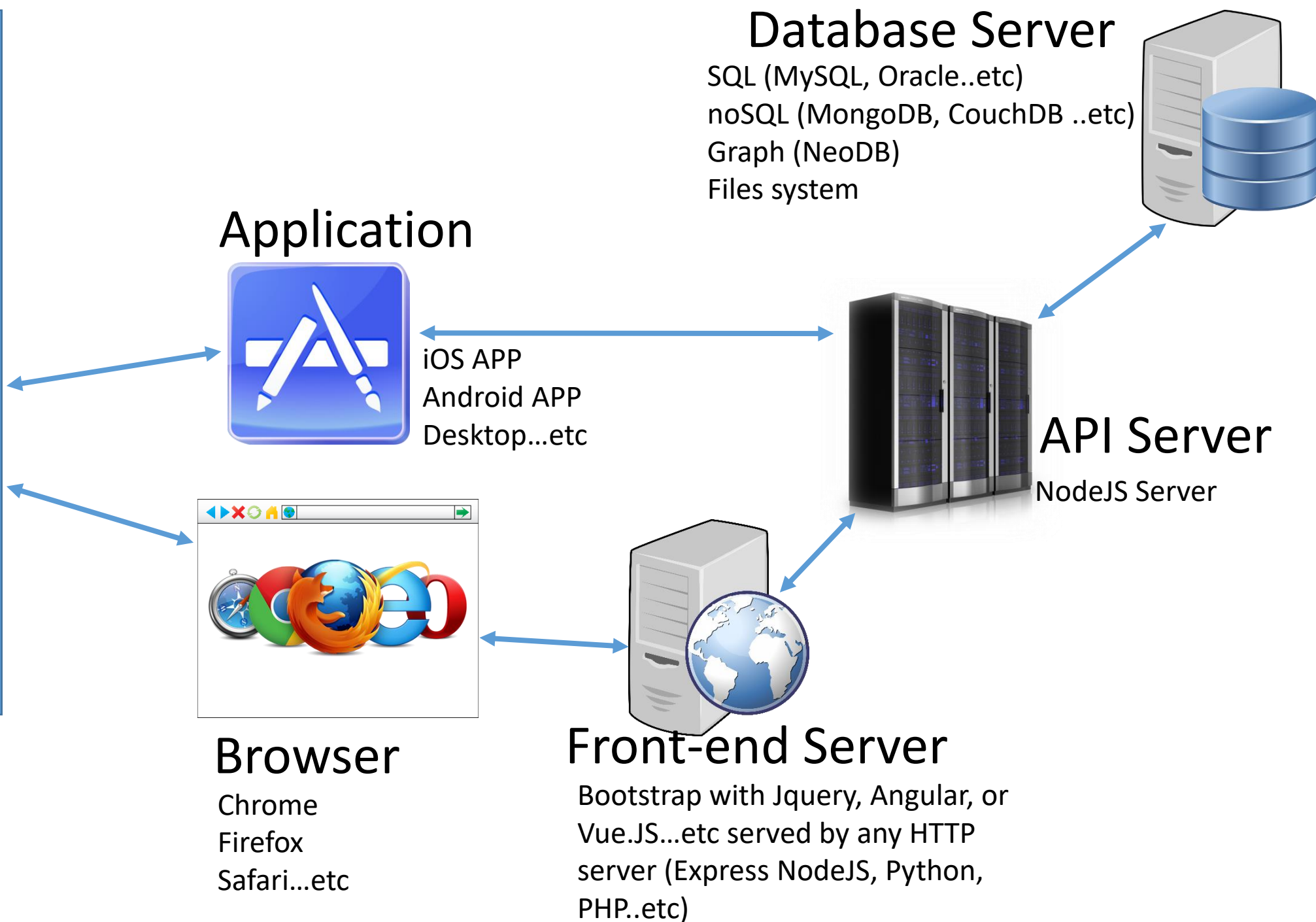
## API Server

NodeJS Server

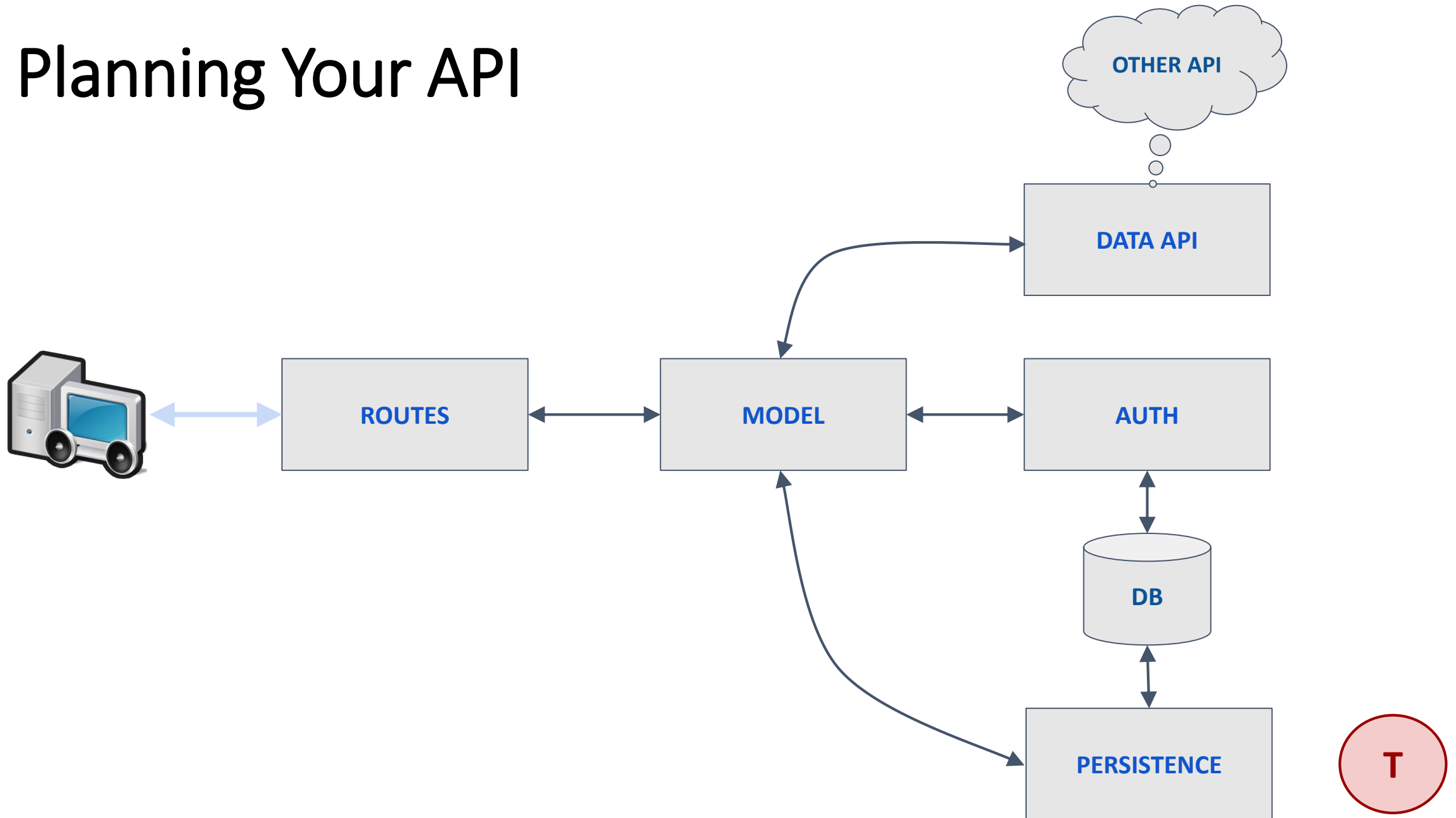


## Front-end Server

Bootstrap with JQuery, Angular, or  
Vue.JS...etc served by any HTTP  
server (Express NodeJS, Python,  
PHP..etc)



# Planning Your API



# Assignment Update

- ~~Git repositories~~
- ~~Plan DB, API and Frontend~~
- ~~Persistent Storage~~
- ~~Basic API with Node.js~~
- ~~Layout contents with Bootstrap~~
- ~~Create Bootstrap forms~~
- ~~Connecting Frontend with Backend (read/write)~~
- ~~Dynamically change contents of frontend~~
- ~~API security & Authentications~~
- Complete API methods (GET, POST, PUT, DELETE, PATCH)
- Unit Testing
- Documenting API

# Summary of last lecture

# Use URIs to specify your objects, not your actions

POST: Api/v1/users/add

POST: api/v1/users/delete/12

POST: api/v1/users/update/12

GET: /users - Retrieves a list of tickets

GET: /users/12 - Retrieves a specific ticket

POST: /users - Creates a new ticket

PUT: /users/12 - Updates ticket #12

PATCH: /users/12 - Partially updates ticket #12

DELETE: /users/12 - Deletes ticket #12

# Partial Response

- Allows you to supply only the information needed
- Reduces the bandwidth

`/books?fields=title,author`

`/books/1449336361?fields=title,author`

# Collection Pagination

- Avoid returning the entire collection!
- Default limit should be decided (first 20 records?)
- Allow developers to specify fewer records
- Also need to specify which block to return.

`/books?limit=15&offset=45`



# What is UX

- The goal of UX design in business is to “improve customer satisfaction and loyalty through the utility, ease of use, and pleasure provided in the interaction with a product.”

Oxford Journal Interaction with Computers

- UX design is the process used to determine what the experience will be like when a user interacts with your product
- The creative and analytical process of determining what a website, device, or piece of software is going to be
- UX design is the art and science of generating positive emotions through product interactions
- UX design is a commitment to building products with the customer in mind

# Know your Audience

- Who you build the website for
- Make your design work best for the type of visitors you care most about
- Create Persona
- 88% of your visitors come through search engines
- May not land on Homepage
- First page they see is the first impression they get

- People looking for information
- They come to your site with specific goal in mind
- Make your design help them quickly find that information or reach that goal

# Standard Design

- A Standard design website is a website that has a layout that similar to other websites
- You can innovate with your content rather than your layout
- Using a standard design will make it
  - intuitive and easy to navigate as people already know how to use it
  - Cross Browse Compatibility
- What about new innovative interaction tools, e.g. Colour wheel.

- Before you design your website, try to write what it does in one sentence
- Website logo, tagline and name should point to the home page
- Pay attention to each page title

# Home Page

- Should say what is your website all about
- Anyone interested in your website will check the homepage
- Show most important and recent contents
- Do not forget that sometimes recent contents may not cater for the actual visitors need
- Home page should guide the visitors to where they want to go
- Landing pages (pages that introduce other subsections) can be described as a mini-homepage

# Menus

- Make your navigation descriptive
- Do not use Jargons in menus
- Horizontal or vertical menu?
- Consistent menus
  - Same menu items
  - Same location
  - Same appearance
- Do not forget footer menu and Go to Top options

# Dropdown Menus

- Help to structure navigation items
- Show them on demand
- Poorly programmed dropdown menu is very frustrating



# Breadcrumbs

- Help user understand the navigation structure
- If they landed on a page rather than homepage helps know where they are
- Give them more navigation options

# Search bar

- Half visitors prefer using a search rather than navigating menus
- More contents on website === need for search bar
- Location top right corner, or top of the vertical navigation column
- Text input size should match how you expect them to type in search queries
- Result page should also has the search bar.
- Plan how you want to introduce your results, for example thumbnails with images and titles are very helpful

# Images

- Should describe your website contents
- Should be optimised (not too big in size)
- Allow images to be zoomed
- if it is about a product, several different images are essentials

# Text

- Cut the amount of unnecessary page
- Help the user to easily locate where they are by using paragraphs
- Add bullets points
- Use proper fonts face and size

# Presenting information

- Long scrolling page
- Series of sequential pages
- Splitting pages by level of details
- If you have a lot of information to present about something, provide a summary section or page
- Visitors unlikely to take decisions with only one click

# Allow Comparisons

- If you have different of similar items on your website (e.g. a particular product) introduce the ability to compare
- Best way to compare is to emphasise the difference
- It is not complicated to create comparison, an easy way is to show a thumbnail and list attributes

# About Us Page

- No page can establish trust as this page
- Can be called the “Can I trust you page”
- Truthful clear information
- Images of people, building, premises
- Contact information
- How long you been in business
- What distinguish you?

# Forms

- Only asks for sensible information
- People should well understand why you ask for each piece of data
- Ask them at the right time.
- Registration forms people may see it a barrier to using your website
- Split your forms into sections
- Add tips and context to each field
- Radio & Check buttons make them accept input on clicking their text
- Use meaningful colours for buttons and isolate them
- Make filling the form an easy process
- Catch errors and do validation on the form before sendind them