Single-page application

A **single-page application** (**SPA**) - is a web application or web site that fits on a single web page with the goal of providing a user experience similar to that of a desktop application ©.

- HTML, JavaScript, and CSS

- The page does not reload at any point in the process

- The control is never transferred to another page

- Dynamic communication with the web server behind the scenes.

Single-page application

JavaScript frameworks:

- AngularJS

- Ember.js

- Meteor.js

- React

- …

- Custom

Single-page application

Server communication:

- Ajax

- JSONP

- Websockets

- Server-sent events (SSE)

Single-page application

Representation of state transition:

- Location hash

- HTML5 History API

Single-page application

Challenges:

- Search engine optimization
- Client/Server code partitioning
- Analytics
- Ad
- Speed of initial load
- Browser history
- …