METEOR'S DATA LAYER

@_thinkholic
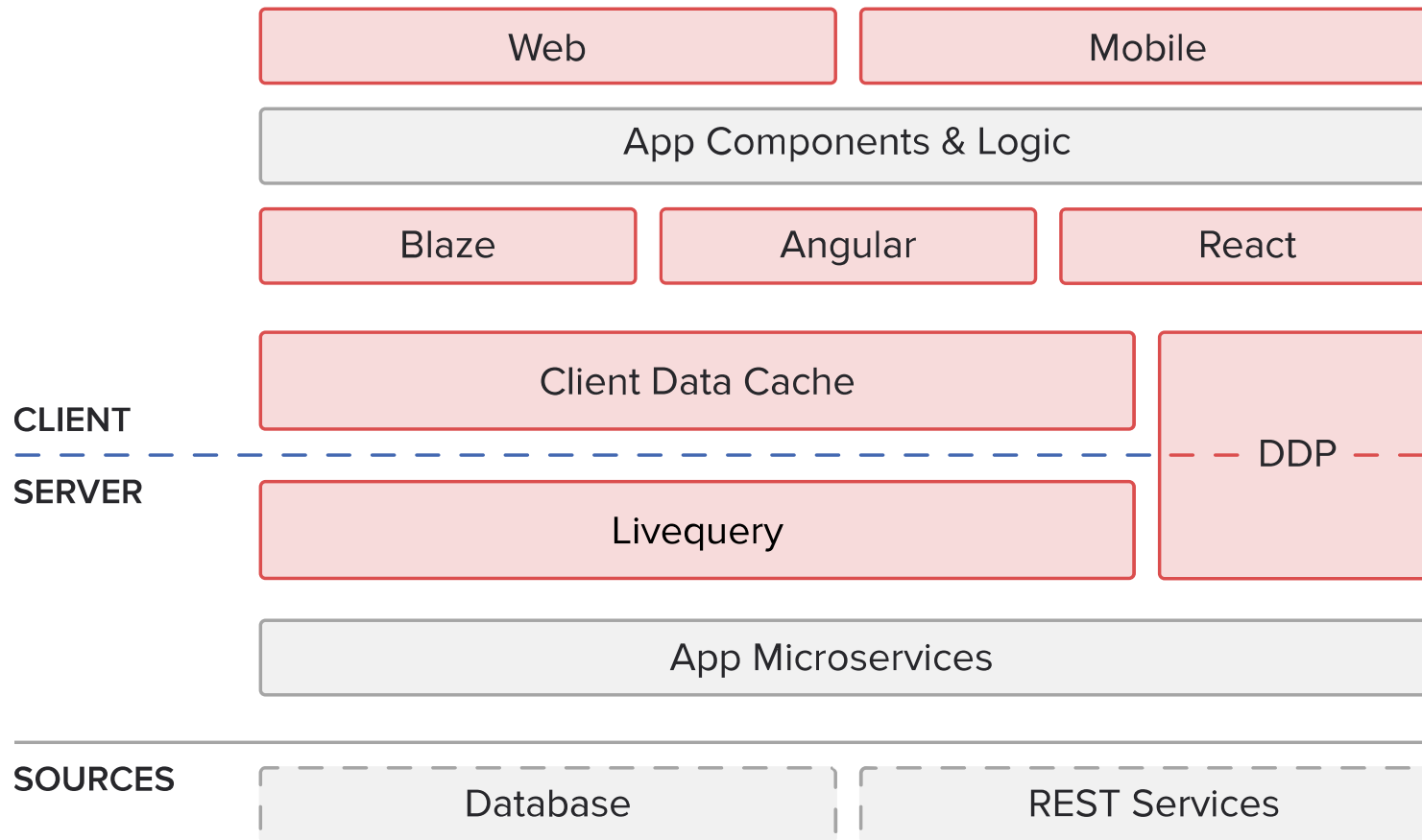
KADIRA

What is Meteor?

- Full-stack JavaScript Framework for both Web and Mobile

- Built on top of the NodeJs

- Open Source

- Rich Community Support

Meteor Architecture & Data-flow

- Meteor use publication/subscription (Pub/Sub) model to expose app's data to client side

- Distributed Data Protocol (DDP)

- Live Query

- MongoDB Oplog

- Mini-mongo

- View Layer with Blaze, React or Angular

Meteor

Web	Mobile

App Components & Logic

Blaze	Angular	React

CLIENT

Client Data Cache	

- DDP - - - -

SERVER

Livequery	

App Microservices

SOURCES

Database	REST Services

Data on the Wire

Meteor doesn't send HTML over the network.
The server sends data and lets the client render it

Database Everywhere

You can use the same methods to access your database from the client or the server.

Full Stack Reactivity

In Meteor, real-time is the default.
All layers, from database to template, update
themselves automatically when necessary.

Sample Code

```js
// server
Meteor.publish('tasks', function() {
  return Tasks.find({}, {sort: {date: -1}});
}

// client
Meteor.subscribe('tasks');

Template.body.helpers({
  tasksList: Tasks.find();
});

// Blaze Template
<template name="blog-posts">
  <div class="container">
    <ul>
      {{#each tasksList}}
        <li>{{taskTitle}}</li>
      {{/each}}
    </ul>
  </div>
</template>
```

Distributed Data Protocol (DDP)

- Communication protocol between Client and Server

- like REST for Websockets

- Stringified JSON over Websocket

- Handling Remote Procedure Calls (RPC)

Distributed Data Protocol (DDP)

```
{"msg": "sub", id: "random-id-2", "name": "account", "params": ["pahan"]}

{"msg": "added", "collection": "transactions", "id": "record-1",
    "fields": {"amount": "50USD", "from": "thanish"}}

{"msg": "added", "collection": "transactions", "id": "record-2",
    "fields": {"amount": "150USD", "from": "ind"}}

{"msg": "ready": "subs": ["random-id-2"]}

{"msg": "added", "collection": "transactions", "id": "record-3",
    "fields": {"amount": "1000USD", "from": "arunoda"}}
```

THANK YOU!.. :)

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