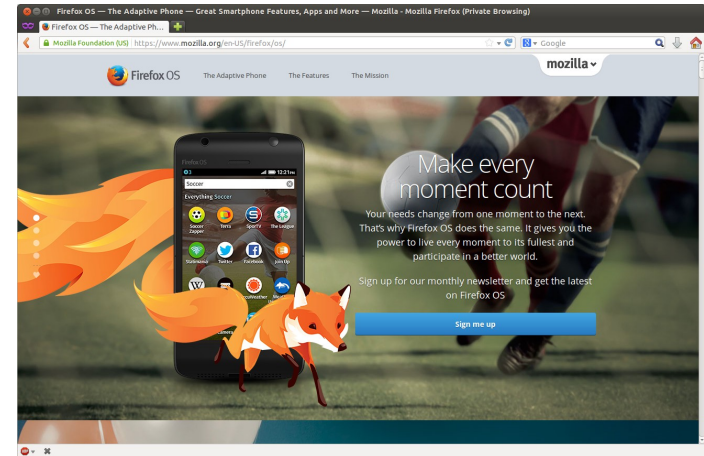
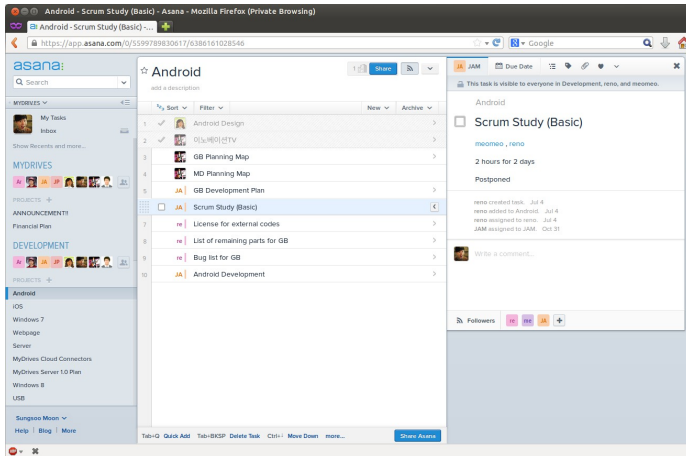


**GOZY** Node.JS Web Framework

# GOZY

GOZY 는 **NodeJS** 기반 Client Framework 과 Server Framework 환경을 통합하는  
**Web Framework**

# Smart World



ios

WEBAPP



# Smart World

화려한 Web UI

다양한 기능

다양한 언어

다양한 브라우저

다양한 해상도

# We, Developers...

- 프론트엔드 개발
  - 프론트엔드 자바스크립트 개발
  - 프론트엔드 웹디자인 (HTML5, CSS)
  - 프론트엔드 프레임워크 개발
- 백엔드 개발
  - 서버 데이터베이스 모델링
  - 서버 뷰 개발
  - 서버기반 프론트엔트지원 개발

# We, Developers...

클라이언트 자바스크립트 프레임워크



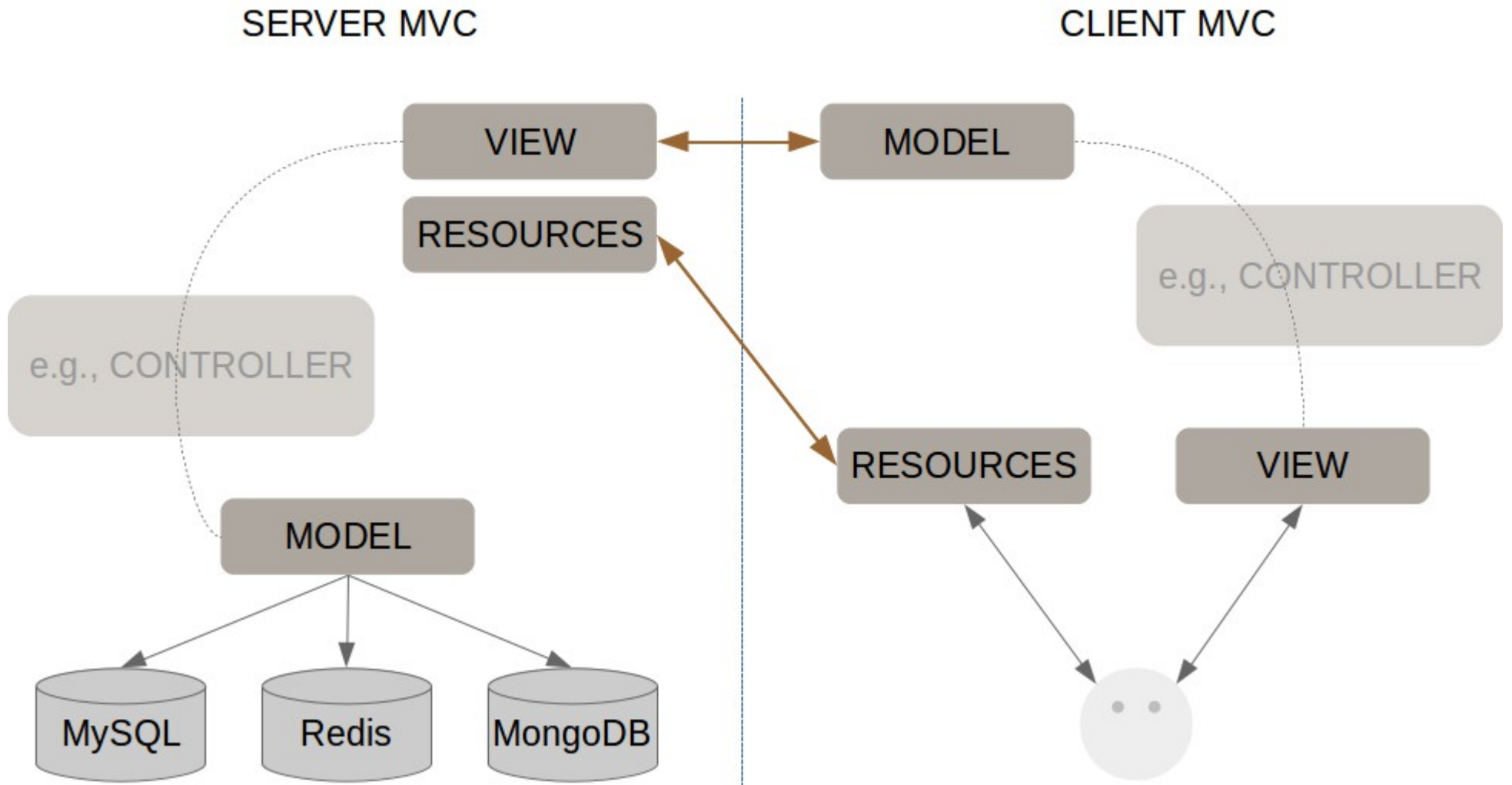
서버 기술의 진보



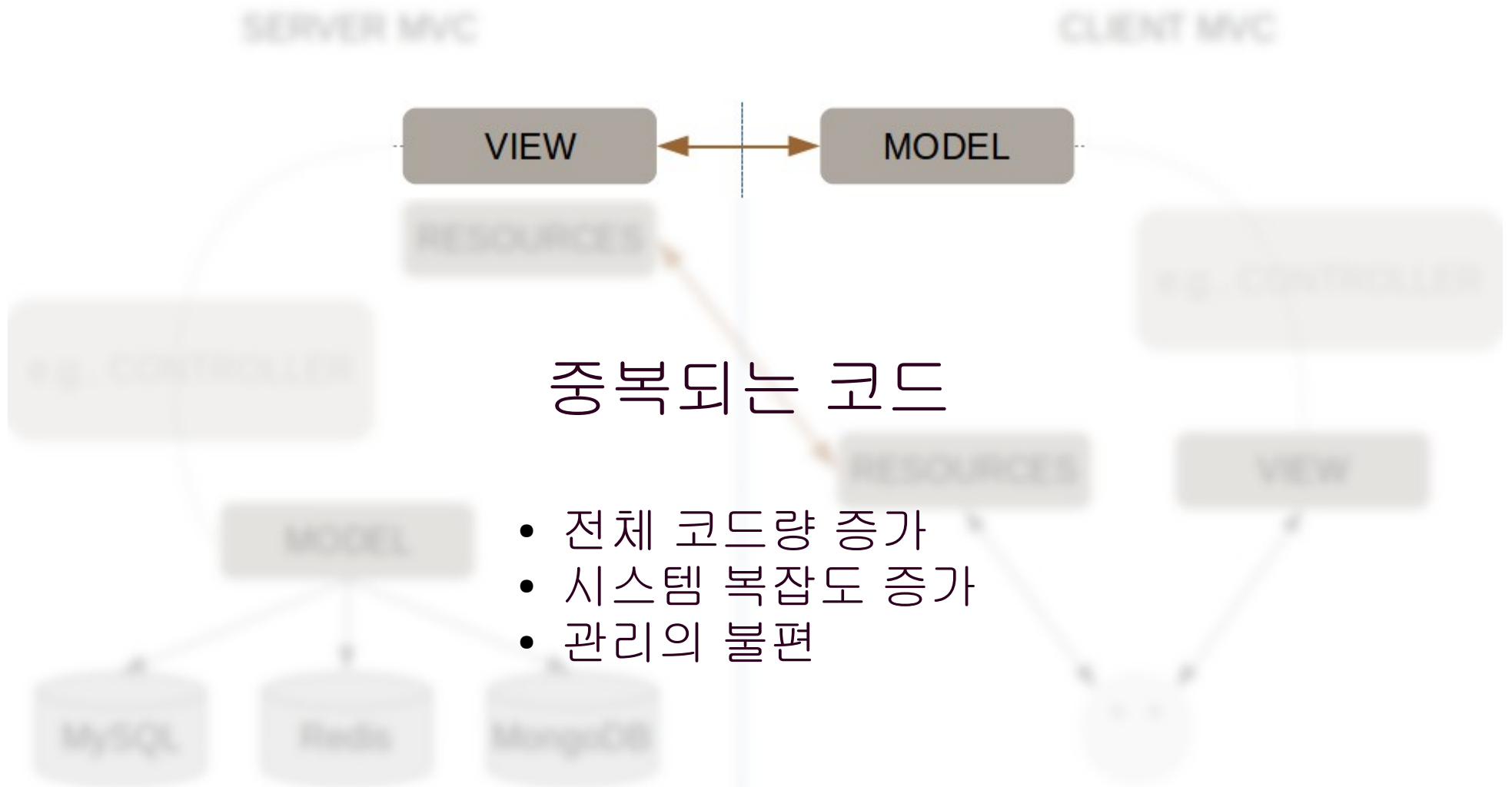
데이터베이스의 진보



# The problem is...

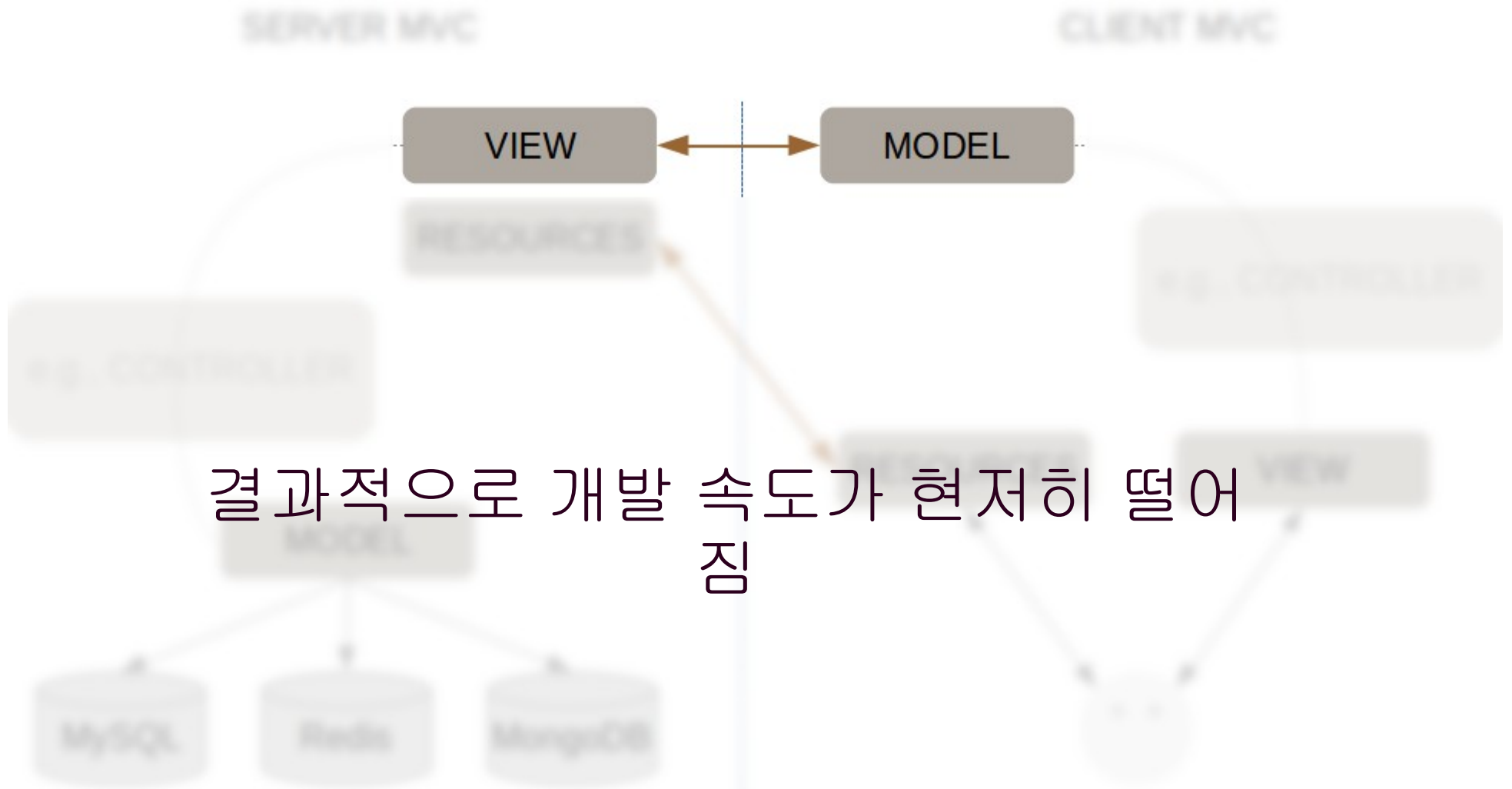


# The problem is...

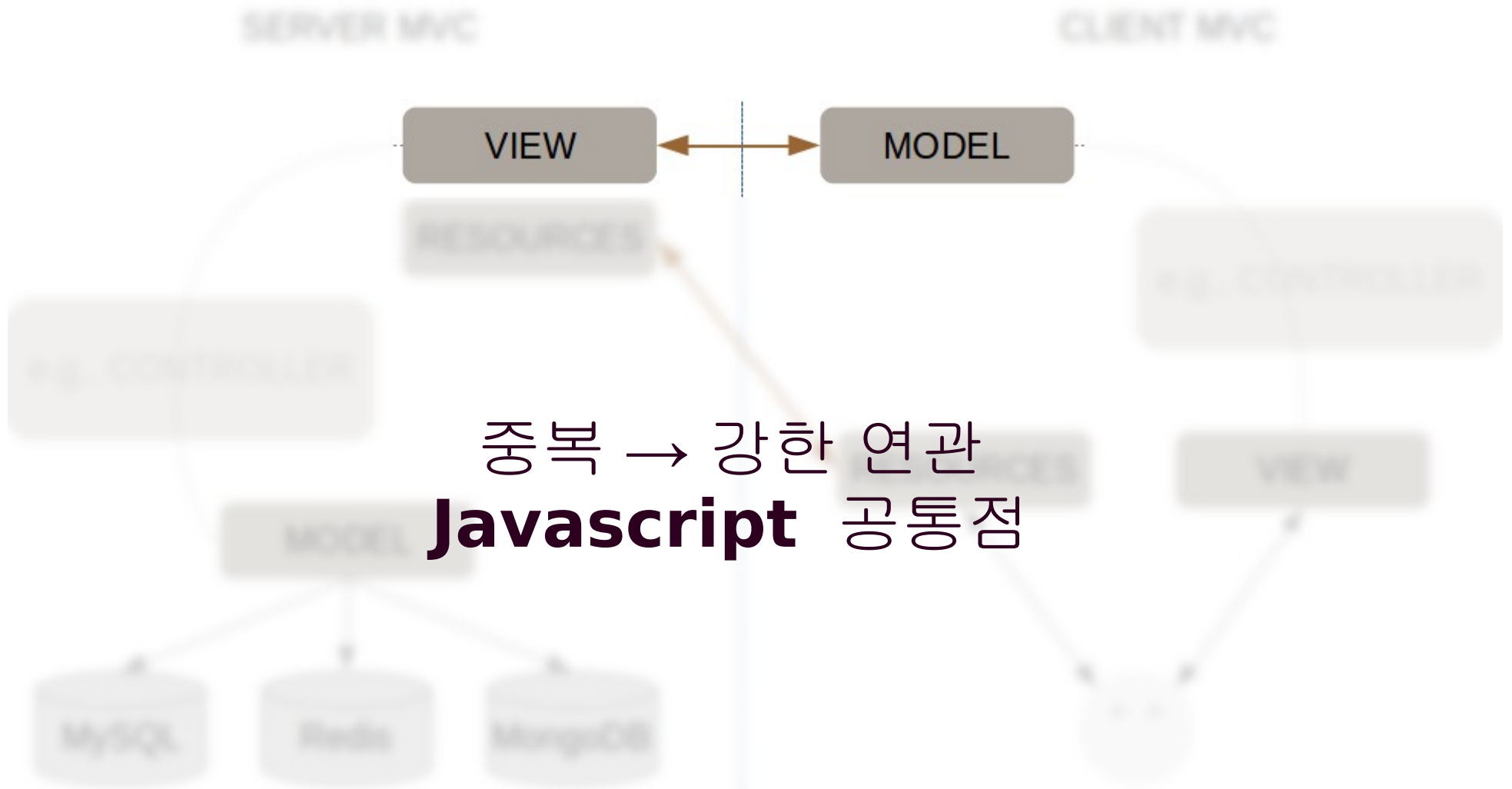




# The problem is...

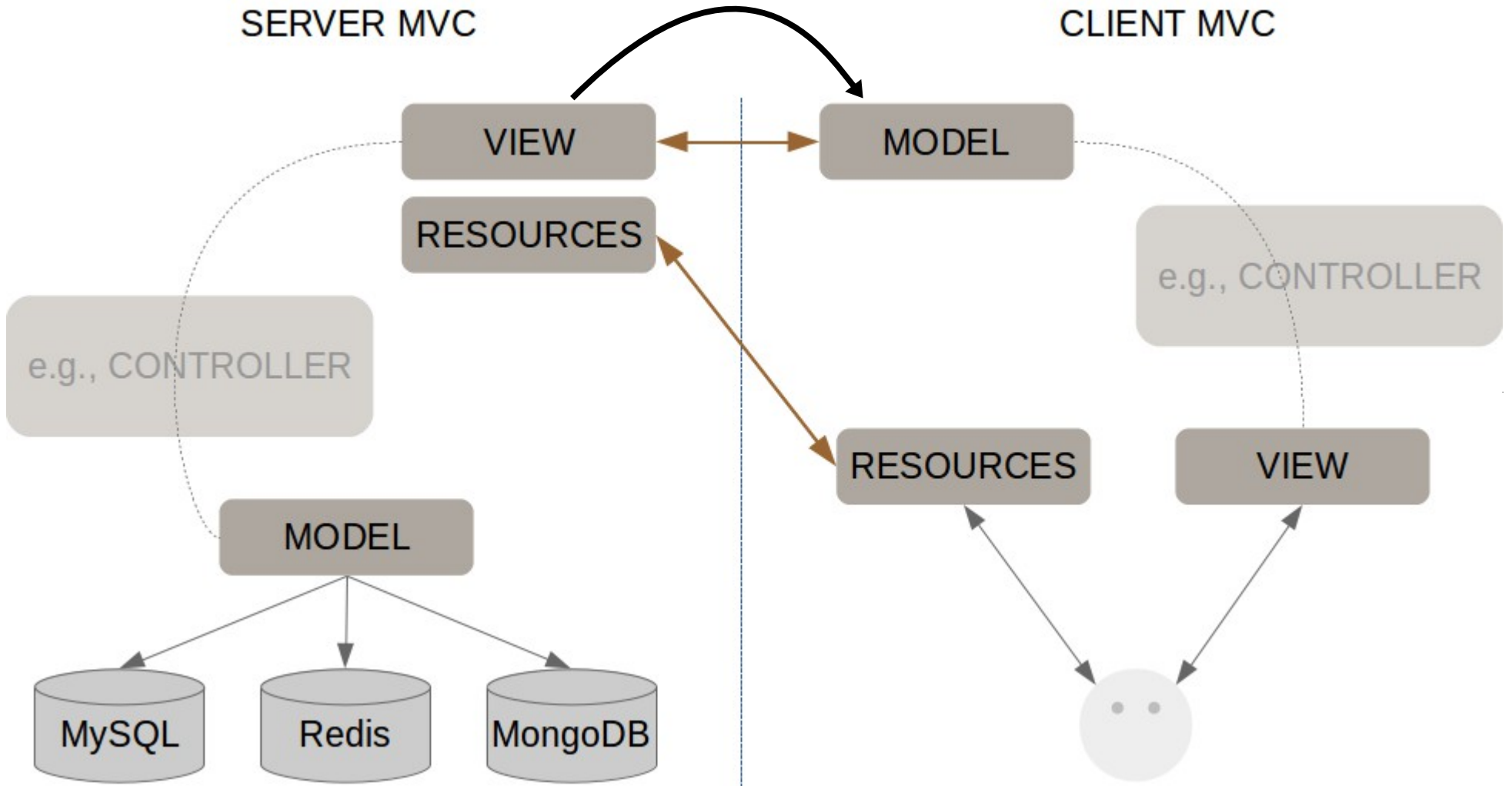


# Where GOZY begun...



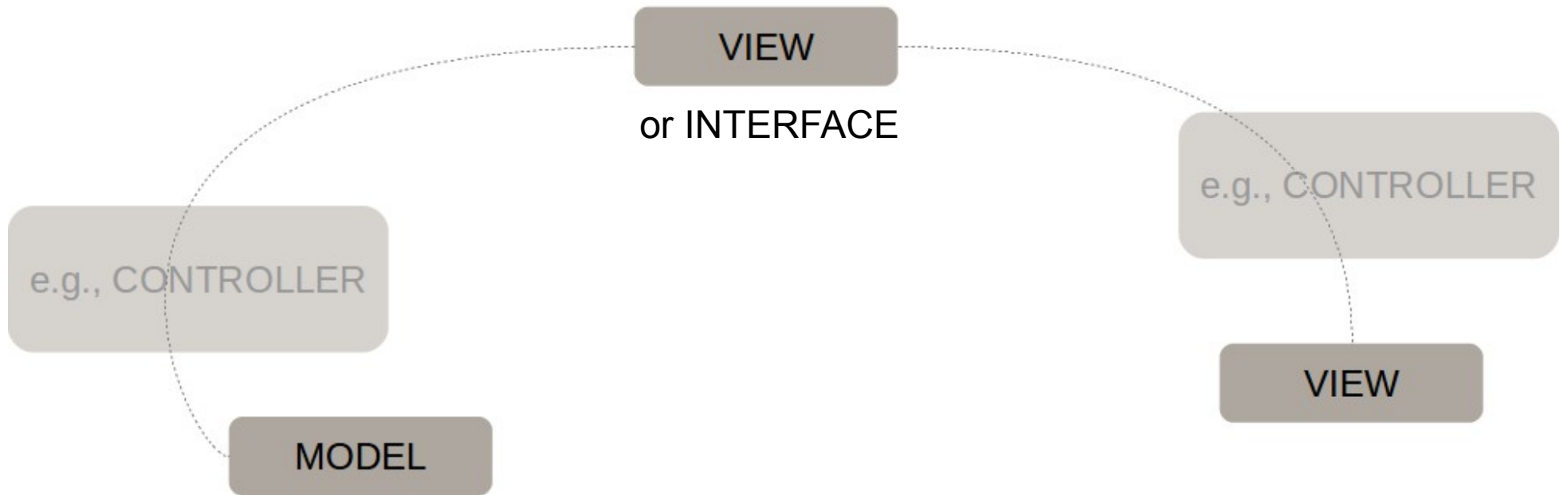
# GOZY's Solution

자동 생성!



# GOZY's Solution

SERVER-CLIENT INTEGRATED MVV



# What does GOZY do

- HTTP Request/Response Handling
- Database & Model (Redis, MySQL, MongoDB)
- View & Renderer
- Backbone Generator (RMI-enhanced)
- Mailer
- Logger

이벤트기반 특성에 따른 직관적 인터페이스

# ExpressJS

- NodeJS 특성인 이벤트를 잘 활용하지 못함
- General HTTP Framework 즉 , Webpage 용으로는 부족한점이 많음
- 여전히 많은 양의 코드를 작성해야함

# What does GOZY do

- HTTP Request/Response Handling

```
require('gozy').View(this, {  
  'accept-url': '/me',  
  'accept-method': 'GET',  
  template: {  
    'en-us': 'application/templates/Index.en-us.html',  
  },  
});
```

```
this.on('text/html', function (request, response) {  
  return response.OK().render(request).commit();  
});
```

**48 줄 (ExpressJS) or 274 줄 (JAVA+TOMCAT) → 10 줄 (GOZY)**

# What does GOZY do

- Database & Model (MySQL 기준)

```
require('gozy').Model(this, 'AccountDB', {
  schema: {
    id: { Id: true, type: 'INTEGER' },
    Email: { type: 'STRING' },
    Password: { type: 'BINARY' },
    MasterSecret: { type: 'BINARY' },
    Locale: { type: 'STRING' },
    UserFlags: { type: 'INTEGER' },
  }
});
```

**62 줄 (ExpressJS+MySQL) or 121 줄 (JAVA+TOMCAT) → 10 줄 (GOZY)**



# What does GOZY do

- Database & Model (MongoDB 기준)

```
require('gozy').Model(this, 'MainDB', {
  defaults: {
    Name: 'default',
    UserId: null,
    UniqueIdentifier: null,
    Credential: {},
    TSLastSync: 0,
    TotalAvailable: 0 /* Byte */
  }
});
```

**18 줄 (ExpressJS+Mongoose) or 298 줄 (JAVA+TOMCAT) → 10 줄 (GOZY)**

# What does GOZY do

- View & Renderer (Template 기준)

```
require('gozy').View(this, {
  'accept-url': /^\/$/, 'accept-method': 'GET',
  template: {
    'Index': {
      'en-us': 'application/templates/Index.en-us.html',
      'ko-kr': 'application/templates/Index.ko-kr.html'
    },
    'MyDrives': {
      'en-us': 'application/templates/MyDrivesViewTemplate.en-us.html',
      'ko-kr': 'application/templates/MyDrivesViewTemplate.ko-kr.html'
    }
  },
  default_template: 'Index', default_locale: 'en-us'
});

this.on('prerequisite', require('./controller/Authentication').allowWebapp);

this.on('text/html', function (request, response, auth) {
  var msg = request.query('msg', allowedMessage);

  if(auth) response.OK().render('MyDrives', auth.u).noStoreCache().commit();
  else response.OK().render({msg: msg}).noStoreCache().commit();
});
```

# What does GOZY do

- View & Renderer (Content Function 기준)

```
require('gozy').View(this, {
  'accept-url': /^\/me\/f\/[0-9a-f]{24}$/ , 'accept-method': 'GET',
  'content': asFile, 'mime': 'application/json'
});

this.on('prerequest', require('./controller/Authentication').allowWebapp);

this.on('application/json', function (request, response, auth) {
  get(auth.u, request.pathname(2), function (code, data) {
    switch(code) {
      case 200: return response.OK().render(data).commit();
      case 404: return response.NotFound().commit();
      case 500: return response.error(data);
    }
  });
});

var asFile = exports.asFile = function (metadescriptor) {
  return {
    id: metadescriptor._id,
    name: metadescriptor.Name,
    size: metadescriptor.Size,
    mime: metadescriptor.MIME,
  };
};
```

**81 줄 (ExpressJS) or 281 줄 (JAVA+TOMCAT) → 23 줄 (GOZY)**

# What does GOZY do

- Backbone Generator With RequestJS and RMI

```
require('gozy').View(this, {
  'accept-url': /^\/f$/, 'accept-method': 'DELETE',
  'backbone': {
    Type: 'collection',
    RequireJS: true,
    ModelOptions: { idAttribute: 'id' },
    CollectionOptions: {
      parse: function (response) {
        this.NextSearchUrl = response.next_search_url;
        return response.data;
      },
      AcceptRMI: ['resolve_path']
    }
  }
});
```

```
this.on('resolve_path', function (request, response, auth) {
  return response(auth.u, request[0], request[1]);
});
```

```
this.on('application/json', function (request, response, auth) {
  Return response.OK().body({ u: auth.u, req: request.query('0') }).commit();
});
```

**62+71+6 줄 (ExpressJS+Backbone/RequestJS)**  
**or 366+71+6 줄 (JAVA+TOMCAT+Backbone/RequestJS)**

# What does GOZY do

- Mailer

```
require('gozy').Mailer(this, 'NoReply', {  
  template: 'application/mailer/templates/InvitationMail.html',  
  from: 'noreply@mydriv.es'  
});
```

```
this.on('mail', function (body, params, send) {  
  send(params.Receiver, params.Sender + ' has invited you!', body);  
});
```

**16 줄 (ExpressJS+MySQL) or 33 줄 (JAVA+TOMCAT) → 7 줄 (GOZY)**

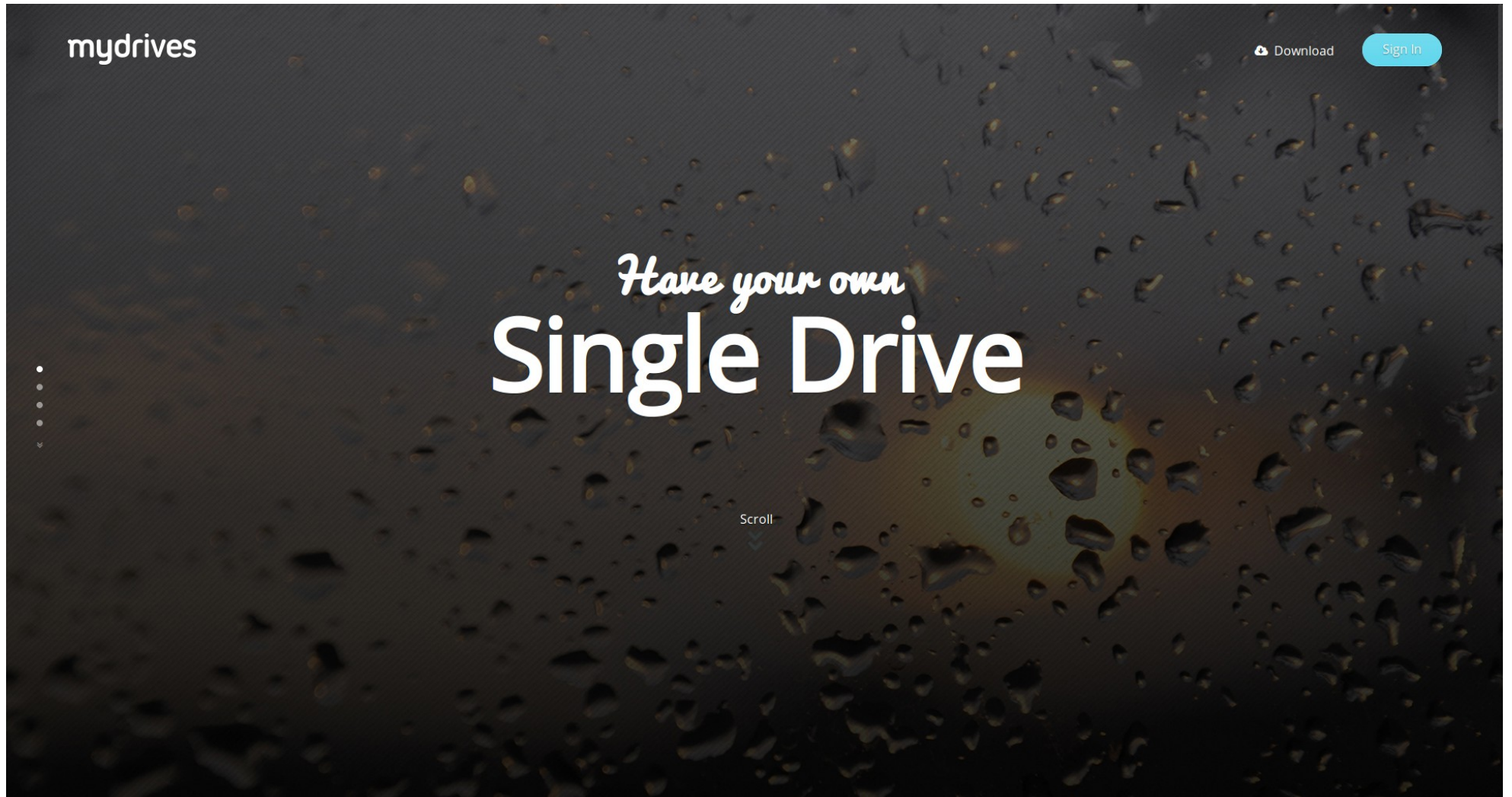
# Advantages

- LOC 감소 및 빠른 프로토타이핑
- 이벤트기반으로 일관적인 인터페이스
- UNDERSCORE 스킴 기반 쉬운 Template
- Front-End 웹개발과 맞물렸을 때 최대 효과 (Fast Template & Cached Resources & RMI)

# Disadvantages

- 새로 배워야함
- 속도면에서 성능이 약간 떨어짐

# DEMO





# Present & Future

- NodeJS 기반 다른 Webframework 에 비해서 성능이 다소 떨어짐  
→ Not Modified 및 Cache 등을 통해 개선중
- 간단한 웹보안문제 (e.g., CSRF) 는 다 해결  
→ 추가적인 보안이 필요 ( 논문 등 발체 )
- 추가적 개발 편의기능 마련

**Thanks!**