



SwimFit



Trainingsplanerstellung

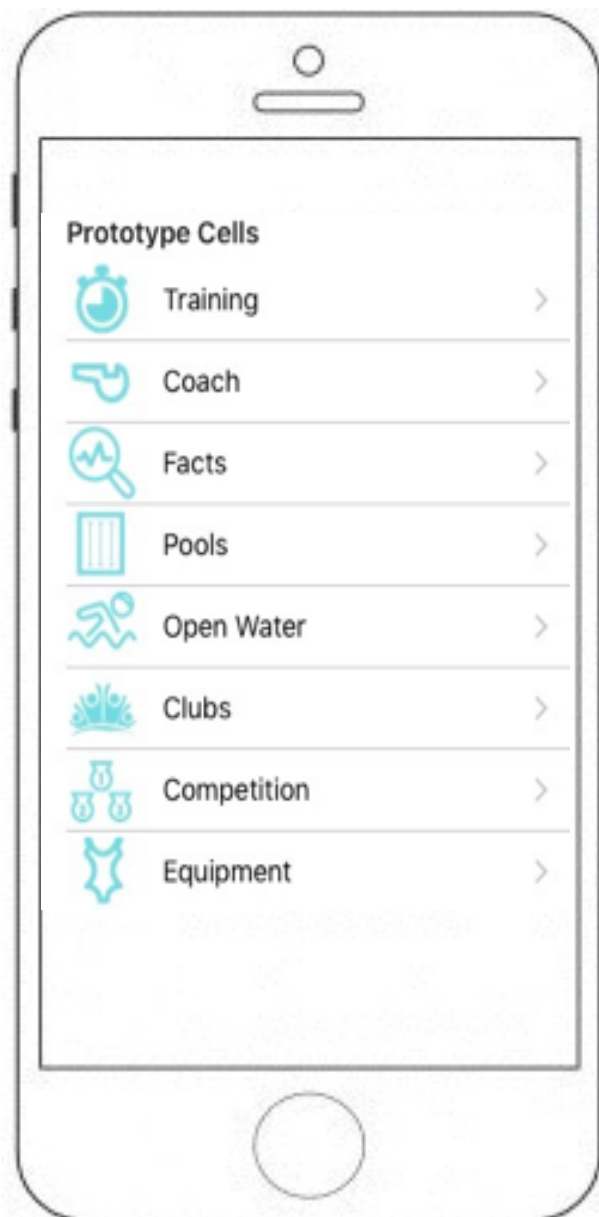
Trainingsauswertung durch Pulsmessung

Schwimmmöglichkeiten in der Nähe anzeigen

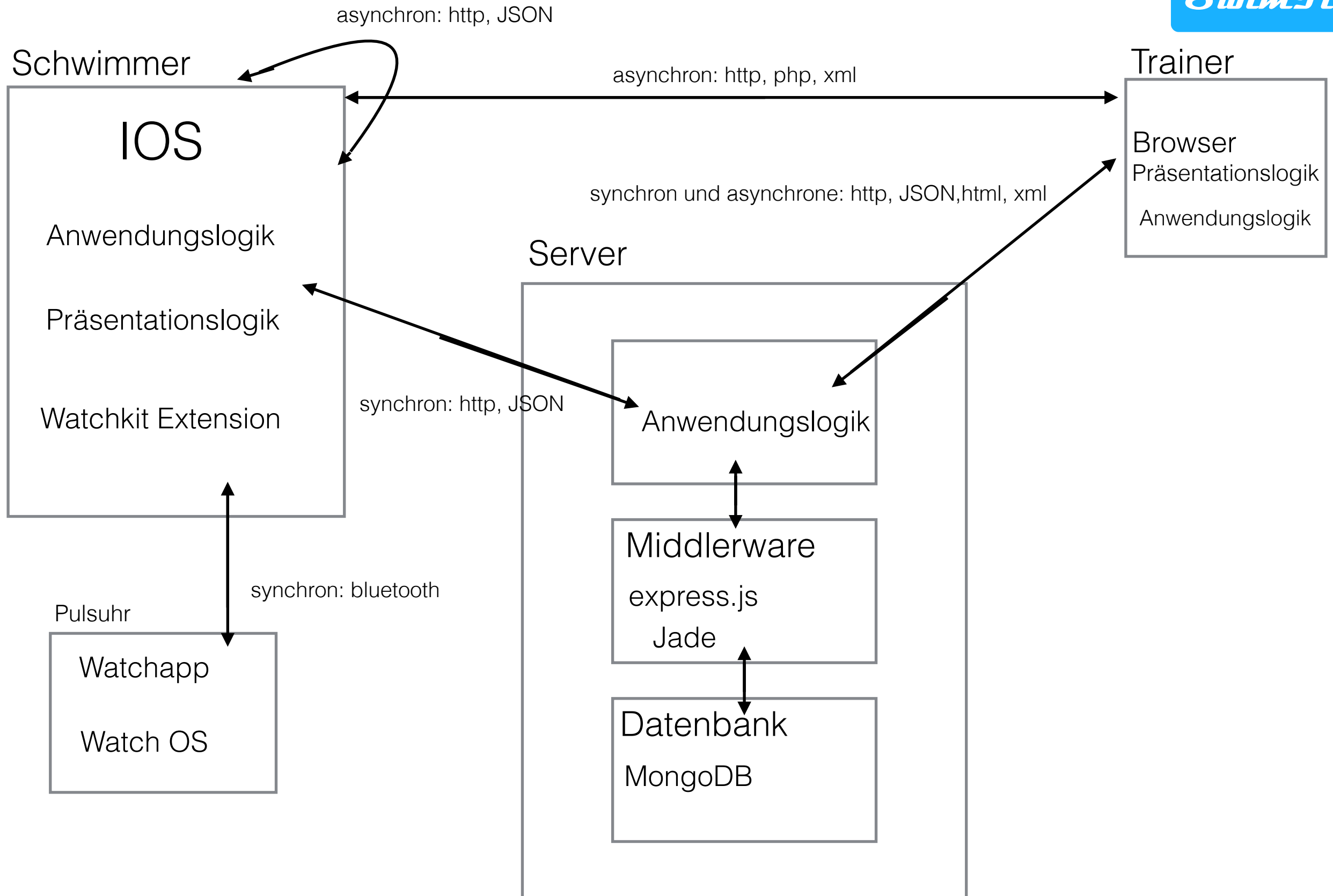
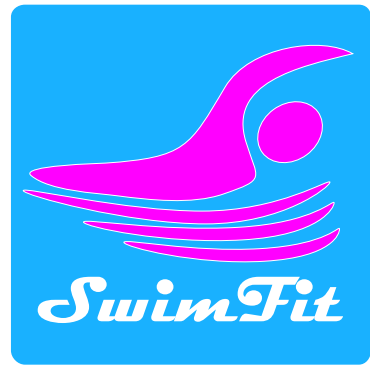
Wettbewerbsvorbereitung und Informationen

Trainingsvideos

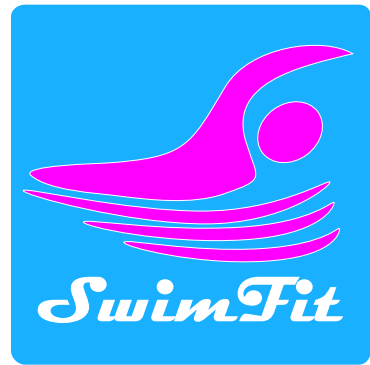
Austausch mit anderen Schwimmern und Trainern



Architektur



Ressourcen Beispiel



Ressourcen	URI	Methode
Liste aller Schwimmer	/schwimmer	GET,POST
einzelner Schwimmer	/schwimmer/{id}	GET,PUT,POST,DELET
Liste aller Schwimmer eines Vereins	/schwimmer?verein=unisport	GET
einzelnes Trainingsmodul	/Modul/{id}	GET,PUT,POST,DELET
einzelner Trainingsplan	/trainingsplan/{id}	GET
Schwimmvereine	/clubs	GET,PUT,POST,DELET

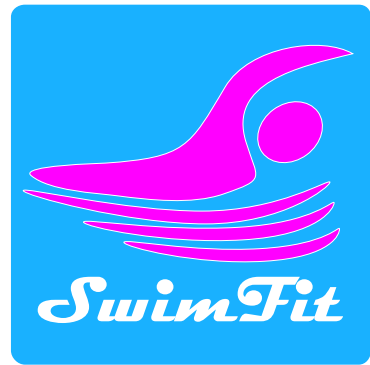
Datenstruktur Trainingsmodul



```
{
modulname: "E1",
ModulGruppe:"A"
Strecke:150,
Lage: "50 B-Arme / K-Beine+ 50 R- Altdeutsch+ 50 ganze",
Zeit:3:30,
Puls: 140
}
```

Anzahl	Strecke (m)	Lage	Puls	Summe	Gesamt	Zeit
Einschwimmen						
1	300	bel	110	300	300	06:00
3	150	50 B-Arme / K-Beine+ 50 R- Altdeutsch+ 50 ganze Lage	120	450	750	03:30
4	25	Brust Technik	140	100	850	00:40
Hauptteil						
18	50	6xMini-Lagen, 1 min Pause, 6xHL, 1min Pause, 6x NL	140	900	1750	01:00
1	400	HL - Technik	135	400	2150	10:00
5	100	HL 25schnell+75locker, 50schnell+50locker, 75schnell+25locker, 100locker, 100schnell	140	500	2650	02:00
4	50	50 Brust gleiten, so wenig Armzüge wie möglich	130	200	2850	00:00
1	400	bel. Beine	140	400	3250	10:00
1	400	bel. Arme mit Paddles und Pullboy	140	400	3650	07:00
Ausschwimmen						
1	200	locker	110	200	3850	00:00
				0	3850	00:00

Trainingsmodul abrufen



```
- (void)import
{
    NSURL* url = [NSURL URLWithString:[kBaseURL stringByAppendingPathComponent:kModul]];

    NSMutableURLRequest* request = [NSMutableURLRequest requestWithURL:url];
    request.HTTPMethod = @"GET";
    [request addValue:@"application/json" forHTTPHeaderField:@"Accept"];

    NSURLSessionConfiguration* config = [NSURLSessionConfiguration defaultSessionConfiguration];
    NSURLSession* session = [NSURLSession sessionWithConfiguration:config];

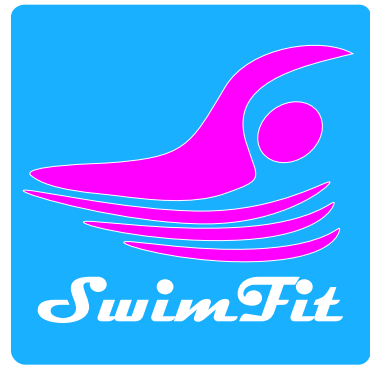
    NSURLSessionDataTask* dataTask = [session dataTaskWithRequest:request completionHandler:^(NSData *data, NSURLResponse *response, NSError *error) {
        if (error == nil) {
            NSArray* responseArray = [NSJSONSerialization JSONObjectWithData:data options:0 error:NULL];
            [self parseAndAddModul:responseArray toArray:self.objects];
        }
    }];

    [dataTask resume];
}

- (void)parseAndAddModul:(NSArray*)modul toArray:(NSMutableArray*)destinationArray
{
    for (NSDictionary* item in locations) {
        Modul* modul = [[Modul alloc] initWithDictionary:item];
        [destinationArray addObject:modul];
    }

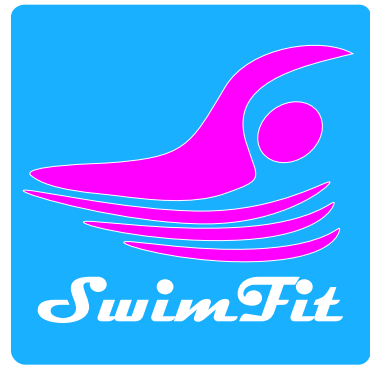
    if (self.delegate) {
        [self.delegate modelUpdated];
    }
}
```


Objekt Trainingsmodul erstellen



```
- (instancetype) initWithDictionary:(NSDictionary*)dictionary
{
    self = [super init];
    if (self) {
        self.modulname = dictionary[@"modulname"];
        self.modulgruppe = dictionary[@"gruppe"];
        self.strecke = dictionary[@"strecke"];
        self.lage = dictionary[@"lage"];
        self.zeit = dictionary[@"zeit"];
        self.puls = dictionary[@"puls"];
        _categories = [NSMutableArray arrayWithArray:dictionary[@"categories"]];
    }
    return self;
}
```


Schwimmer speichern



```
- (void) persist:(Schwimmer*)schwimmer
{
    if (!schwimmer || schwimmer.name == nil || schwimmer.name.length == 0) {
        return;
    }
}
```

```
NSString* schwimmer = [kBaseURL stringByAppendingPathComponent:kSchwimmer];
```

```
BOOL isExistingSchwimmer = schwimmer._id != nil;
NSURL* url = isExistingSchwimmer ? [NSURL URLWithString:[schwimmer stringByAppendingPathComponent:schwimmer._id]] :
[NSURL URLWithString:schwimmer];
```

```
NSMutableURLRequest* request = [NSMutableURLRequest requestWithURL:url];
request.HTTPMethod = isExistingSchwimmer ? @"PUT" : @"POST";
```

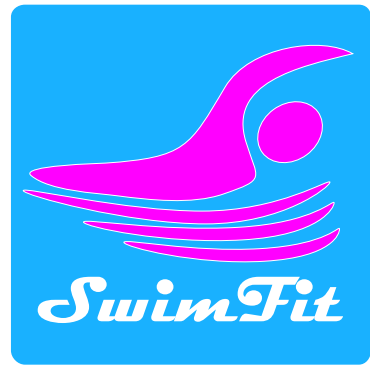
```
NSData* data = [NSJSONSerialization dataWithJSONObject:[schwimmer toDictionary] options:0 error:NULL];
request.HTTPBody = data;
```

```
[request addValue:@"application/json" forHTTPHeaderField:@"Content-Type"];
```

```
NSURLSessionConfiguration* config = [NSURLSessionConfiguration defaultSessionConfiguration];
NSURLSession* session = [NSURLSession sessionWithConfiguration:config];
```

```
NSURLSessionDataTask* dataTask = [session dataTaskWithRequest:request completionHandler:^(NSData *data, NSURLResponse *response, NSError *error) {
    if (!error) {
        NSArray* responseArray = @[[NSJSONSerialization JSONObjectWithData:data options:0 error:NULL]];
        [self parseAndAddSchwimmer:responseArray toArray:self.objects];
    }
}];
[dataTask resume];
}
```

Schwimmerobjekt in JSON umwandeln



```
#define safeSet(d,k,v) if (v) d[k] = v;
```

```
- (NSDictionary*) toDictionary
```

```
{
```

```
    NSMutableDictionary* jsonable = [NSMutableDictionary dictionary];
```

```
    safeSet(jsonable, @"name", self.name);
```

```
    safeSet(jsonable, @"geburtstag", self.geburtstag);
```

```
    safeSet(jsonable, @"geschlecht", self.geschlecht);
```

```
    safeSet(jsonable, @"kenntnisse", self.kenntnisse);
```

```
    safeSet(jsonable, @"verein", self.verein);
```

```
    safeSet(jsonable, @"ruhepuls", self.ruhepuls);
```

```
    return jsonable;
```

```
}
```