Fitness – a Web App with Node, Express and Mongo

Purpose:

To demonstrate fulfilment of the learning objectives:

- Explain the principles for using a MVC framework in a web server
- Design and implement a web site that include persistence of data in a database.
- Basic knowledge regarding hosting of web applications including cloud based hosting.

Technology requirements

The web app must use Node as web server, Express as MVC framework, Pug as HTML-template engine and Mongo as database. It is recommended to use Heruko as Cloud provider.

Functional requirements

Develop a fitness web app. The user should be able to create workout programs similar to the one shown beneath. A workout program is a collection of exercises (workout) that each have a name, description, number of sets and number of repetitions or time.

Basic functionality:

- The user can create a new workout program
- The user can add new exercises to a workout program
- An exercise has a name a description, number of sets and number of repetitions or the time it should last.
- Workout programs is persisted in a database (MongoDb)

Optional functionality:

The user can log workout activity

Workout program example.

Exercise	Description	Set	Reps/time
Squat	Stand with your feet spread shoulder-	3	20
	width apart. Lower your body as far as		
	you can by pushing your hips back and		
	bending your knees. Pause, and then		
	slowly push yourself back to the starting		
	position.		
Push ups	Place your hands on the floor with legs	3	10
	straight out behind you resting on your		
	toes. Bend your arms and slowly		
Plank	Place your elbows on the floor shoulder-	1	30 sec
	width apart with legs stretched out behind		
	you so only your elbows and toes are in		
	contact with the ground. Use your		
	abdominal muscles to keep		