

Detailed instructions for setting up the experiment

We create a cloud server on [DigitalOcean](#).

We chose the image of Ubuntu 16.04.3 x64 with 1GB/1CPU, 30GB SSD disk and 2TB Transfer.

A. To complete the preparation of the server, please follow these manuals:

How to install node.js:

<https://www.digitalocean.com/community/tutorials/how-to-install-node-js-on-ubuntu-16-04>

How to install Nginx:(web servers)

<https://www.digitalocean.com/community/tutorials/how-to-install-nginx-on-ubuntu-16-04>

How to setup node.js Application for Production on Ubuntu:

<https://www.digitalocean.com/community/tutorials/how-to-set-up-a-node-js-application-for-production-on-ubuntu-16-04>

How to install pm2:

<http://pm2.keymetrics.io/docs/usage/quick-start/>

How to install postgresql:

<https://www.digitalocean.com/community/tutorials/how-to-install-and-use-postgresql-on-ubuntu-16-04>

B. To set up the database on the server, follow these steps:

How to add password to user: (must for creating a connection in pg plugin)

```
ALTER USER "postgres" WITH PASSWORD 'postgres';
```

How to create database: (must for creating a connection in pg plugin)

```
CREATE DATABASE
```

Open the database:

```
sudo -u postgres psql  
\connect breakthecode;
```

Create tables:

```
CREATE TABLE Experimenter(  
  ID bigint PRIMARY KEY,  
  start boolean,  
  timestamp timestamp default current_timestamp,  
  age int,  
  gender text,  
  selfTaught boolean,  
  baFinished boolean,  
  baStarted int,  
  baStudied int,  
  maFinished boolean,  
  maStarted int,
```

```
maStudied int,  
phdFinished boolean,  
phdStarted int,  
phdStudied int,  
yearsOfExperience int,  
programmingLanguages text ARRAY,  
assessSelfProgrammingSkills int,  
firstTime boolean,  
testPlanId text ARRAY,  
mode text  
);  
CREATE TABLE Answer(  
  userId bigint,  
  questionId text,  
  rightAnswer text,  
  userAnswer text,  
  serialNumber int,  
  duration double precision,  
  skip boolean,  
  timestamp timestamp default current_timestamp  
);
```

C. To run the experiment, follow these steps:

Pull the code:

git pull <https://github.com/shulamyt/break-the-code.git>

Go to folder:

cd break-the-code

Check out the correct branch:

git checkout icpc17

Run install:

npm i

Build it:

npm run build

Run it:

npm run start