**Advanced Date Picker**

1. **Please create TC design to cover this functionality;**

Future Month Test

Given: current date is 2017-02-12

As a User I open application page

I enter 2017 in YYYY filed

I enter 03 in MM filed

When: I submit data

Then: record 2017-03-15 appears in DB

1. **Please define high-level automation strategy (short overview);**

- E2E tests (cover base functionality and focused on user actions) best on UI

* Functional tests (calculation logic, validation) could be performed on API level
* Integration tests (check integration with DB and other services)
* Unit test (check backend methods)

Test sets could be created additionally:  
- Regression set (check if new features didn’t break something)

- Smoke set (cover base functionality) executed when new build is released  
  
Additional types of testing:  
- Security (SQL injections)

* Performance
* UI (pixel perfect)

1. **Please list most likely problems you could expect during such functionality testing.**

Potential problems:

* DB store (how dates stored? What is primary key there? What if I set two similar dates)
* Invalid inputs (invalid format, invalid values, invalid combination of fields)
* Border  date values (leap year, 32 of December, 1st year, 13 month and so on)
* How user understands that his input is stored?
* Input field label called «When will you be travelling there» I assume that only future date could be used there
* In backend examples -> Date passed YYYY -> «-2 or more year» provided example with the current year not -2