

TARTU ÜLIKOOL
Institute of Computer Science
Computer Science Curriculum

Kevin Kattai

**Comparison of different integration testing
tools by the example of Playtech**

Bachelor's Thesis (9 ECTS)

Supervisors: Evgenia Trofimova
Karel Kravik

Tartu 2018

Comparison of different integration testing tools by the example of Playtech

Abstract:

The core part of software integration is testing that the integration works correctly. This means that a person, responsible for integration testing, must verify that communication between systems is working as specified and every aspect of integration is followed during the integration process. People responsible for integrating may be called differently in different corporate environments, but in Playtech, this role is named as integration manager. Integration managers in Playtech have a major role in connecting Playtech owned services or 3rd party services to Playtech' centralized system called (Information management system) IMS. It is extremely important to test the 3rd party service in order to guarantee that there are no monetary discrepancies between two systems and that all the services (deposits, withdrawals, gameplay, products, etc.) are available for players. This research focuses on testing and comparing different integration tools and what are their advantages and disadvantages. The aim of this research is to compare available integration testing tools by the example of Playtech, in order to conclude which tools are most suitable for integration manager role in Playtech.

Keywords:

Playtech, IMS, external wallet, integration, software testing, integration testing, API

CERCS: P175, Informatics, systems theory

Erinevate integratsioonitööriistade võrdlus Playtech'i näitel

Lühikokkuvõte:

Oluline osa tarkvara integratsioonist on integratsiooni testida. See tähendab, et inimene, kes on vastutav integratsiooni testimise eest peab kinnitama, et süsteemide vaheline ühendus toimib ning iga aspekt on integratsiooni käigus kaetud. Erinevates ettevõtetes nimetatakse integratsiooniga tegelevate inimeste rolle erinevalt, kuid Playtechis on selle nimeks integratsiooniprojektide juht. Integratsiooniprojektide juhtide ülesandeks Playtechis on ühendada Playtech'i enda teenuseid või kolmandate osapoolte teenuseid Playtech'i peamise teenusega, mida kutsutakse IMSiks. Selleks, et ei tekiks kahe süsteemi vahel rahalist puudujääki ja kõik teenused oleks mängijatele kättesaadavad (deposiit, raha väljavõtmine, mängimine, tooted jne) on äärmiselt oluline testida integratsiooni kolmandate osapooltega. Antud töö keskendub erinevate integratsioonitööriistade testimisele ja võrdlemisele, et välja tuua mis on

nende eelised ja puudused. Töö eesmärgiks on võrrelda erinevaid tööriistu, millega on võimalik integratsioone testida, mis on kättesaadavad integratsiooniprojektide juhtidele Playtechis, selleks, et välja selgitada millised on kõige paremad antud protsessi läbiviimiseks.

Võtmesõnad:

Playtech, IMS, external wallet, integratsioon, tarkvara testimine, integratsiooni testimine, API

CERCS: P175, Informaatika, süsteemiteooria

Non-exclusive licence to reproduce thesis

I, Kevin Kattai,

1. herewith grant the University of Tartu a free permit (non-exclusive licence) to reproduce, for the purpose of preservation, including for the purpose of preservation in the DSpace digital archives until expiry of the term of validity of the copyright “Comparison of different integration testing tools by the example of Playtech” supervised by Evgenia Trofimova
2. Making the thesis available to the public is not allowed.
3. I am aware of the fact that the author retains the right referred to in point 1.
4. This is to certify that granting the non-exclusive licence does not infringe the intellectual property rights or rights arising from the Personal Data Protection Act.

Tartu, 14.05.2018