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Liis Suuressaar

Monitoring Software Errors:

Case Study at Playtech Live Unit

Master's Thesis (15 ECTS)

Supervisor: Dietmar Alfred Paul Kurt Pfahl, PhD

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Jälgimisteenus tarkvaravigadele: juhtumianalüüs Playtech Tallinna Live Unit'is

Lühikokkuvõte:

Antud magistritöö uurib tarkvaravigade jälgimist juhtumianalüüsi näol, mis viidi läbi Playtechis. Tarkvaravead selle magistritöö keskmes on vead, mille tagajärjel panused luhtuvad. Luhtunud panus on situatsioon mängus kui mängija panus lükatakse serveri poolt tagasi. Luhtunud panustega kaotab aga Playtech otseselt sissetulekus. Seega on oluline, et tarkvaravead avastatakse ja lahendatakse võimalikult vara. Antud juhtumianalüüs üritab parendada tarkvaravigade avastamist pakkudes välja võimaluse efektiivsemaks raporteerimiseks. Välja pakutud võimalus antud juhtumianalüüsis on poolautomaatne jälgimisteenus. Jälgimisteenus võimaldab perioodiliselt väljastada raporteid, mis edastatakse otse Playtechi meeskondadele. Meeskonnad saavad raportite põhjal ülevaate esinenud tarkvaravigadest, need prioritiseerida ja vastavalt prioriteetidele parandada. Võrreldes varasema raporteerimisega pakub jälgimisteenus kolme põhilist eelist. Esmalt aitab jälgimisteenus avastada rohkem tarkvaravigasid. Jälgimisteenus kaasab raporti tegemisse kõik luhtunud panused, mis juhtusid eelmise *release*'i ajal. See aitab avastada suurema hulga potentsiaalselt olulisi tarkvaravigu. Teiseks annab jälgimisteenus üldise ülevaate tarkvara-*release*'ist. Jälgimisteenust saab tänu sellele kasutada tarkvara-*release*'ide kvaliteedi hindamiseks. Kolmandaks võimaldab jälgimisteenus motiveerida kasiinosid integratsiooniprobleemidega tegelemisel. Nimelt esineb tarkvaravigasid, mille parandamine sõltub kasiinodest. Ilma korraliku ülevaateta ei ole aga kasiinod tihti motiveeritud tegelema integratsiooniga seotud tarkvaravigadega pidades neid tegelikkusest vähemolulisemaks. Jälgimisteenus võimaldab pakkuda ülevaadet tarkvaravigadest, mille abil on võimalik kasiinosid motiveerida nendega tegelema.

Võtmesõnad:

Jälgimine, raporteerimine, tarkvaravead, Playtech, logifail

CERCS: P175 Informaatika, süsteemiteooria

Monitoring Software Errors: Case Study at Playtech Live Unit

Abstract:

This master thesis presents a case study on software error monitoring taking place in Playtech Tallinn Live Unit. This case study takes a narrow focus on monitoring software errors that result in failed bets. Failed bet is a situation in a casino game where a bet that a player aimed to place was rejected by the server. It is very important for Playtech to keep the number of bets failing due to software errors as low as possible as this means loss in profit. This case study aims to improve the situation in discovering software errors by introducing a more efficient way for reporting. The more efficient way is a monitoring service. Monitoring service produces semi-automated reports that are directly forwarded to Playtech Teams. Using the reports teams can get an overview of the software errors the latest release included, prioritize them and fix the issues based on priorities. Compared with the current situation in reporting, monitoring service offers three main advantages. First, bigger number of software errors get discovered. Monitoring service monitors all the failed bets that happened during that release and this helps to discover more potentially important software errors. Second, software quality in terms of failed bets can be evaluated properly. The reports give an overview of the latest release. This can be used in order to evaluate the software quality. Third, casinos would be motivated to deal with software errors caused by integration issues. There are software errors that can be only fixed on the casino side. However, casinos are often not aware of the impact of these software errors. Monitoring service would offer a better overview of integration issues for casinos. Through it casinos would be more motivated to fix software errors on their side.

Keywords:

Monitoring, reporting, software errors, Playtech, log file

CERCS: P175 Informatics, systems theory