INVEST User Stories & Gherkin Acceptance Criteria

Bogdan Doaga

ThoughtWorks®

BOGDAN DOAGA
Senior Product Manager

10 ani de Software Product Management in organizatii diverse, variind de la startup-uri la corporatii multi-nationale.

Domenii principale de expertiza:
- AdTech
- AML
- Automotive

Parte din echipa care a construit unul dintre cele mai de succes startup-uri romanesti: LiveRail, achizitionat de Facebook in 2014

Agenda

- INVEST User Stories
- Gherkin Acceptance Criteria

User story definition

What is a user story ?

A user story describes functionality that will be valuable to either a user-persona or a buyer-persona of a system or software.

Where are the details ?

- An example from a job posting and search website

  A user can post her resume to the website, such that it can find a new job.

  ○ What values can users search on? Country? City? Job title?
  ○ Does the user have to be a member of the site?
  ○ Can search parameters be saved?

- Many of these details can be expressed as additional stories or as acceptance criteria
- A too large user story is called an _epic_ and can be split into stories of smaller size

So a user story…

- Basic unit of work in an agile project
- Describes a desired piece of business functionality
- Small enough to be implemented in an iteration
- A good user story is the simplest statement about the system that:
  - The customer cares about
  - Test cases can be written to verify
  - Can be reasonably estimated
  - Can be reasonably prioritized

INVEST in good stories

I	Invest
N	Negotiable
V	Valuable
E	Estimable
S	Small
T	Testable

INVEST in good stories

- Independent
  - Avoid introducing dependencies (leads to difficulty prioritizing and planning)
- Negotiable
  - Stories are not written contracts
  - Do not need to include all details
- Valuable
  - Valuable to users and customers
- Estimable
  - Because stories are used in planning
- Small
  - Large stories are hard to estimate
- Testable
  - Tests demonstrate that a story meets the customer's expectations
  - Automate if possible

Examples

Identify clearly the different users and their expectations ...

... (work on the right priorities)

Generic user story

- **As a** user, **I want** to reserve a hotel room, **such that** I have a place to sleep during my travel

Specific user story

- **As a** vacation planner, **I want** to see photos of the room, **such that** I can understand if the room is fit for my needs

Specific user story

- **As a** frequent flyer, **I want** to rebook a past trip, **so that** I save time booking

Examples

Identify clearly the different users and their expectations ...

... (work on the right priorities)

Generic user story

- **As a** student, **I want** to understand the subject in the class, **such that** I can learn effectively

Specific user story

- **As a** lecturer, **I want** to receive live feedback during the lesson, **such that** I can adjust my presentation

Specific user story

Why user stories

Emphasize verbal communication

Can be understood equally by developers and customers

Can be used for planning iterations

Support and encourage iterative development

Support participatory design

David Hussman on Helping Organizations Adopt Agile – User Stories
http://www.infoq.com/interviews/interview-david-hussman-agile

Criterii de Acceptanta Gherkin

Criteriile de acceptanta reprezinta cerintele si conditiile esentiale impuse care trebuie indeplinite pentru ca User Story-ul sa fie acceptat ca livrat.

Modul de exprimare Gherkin ofera o modalitate specifica de scriere a criteriilor de acceptanta:

Scenariu → Given → When → Then

Scenariu: Descrierea actiunii utilizatorului (inclusiv potentiale greseli de utilizare)

1. *GIVEN*: Defineste contextul. Pe ce pagina suntem si in ce situatie? Utilizatorul e administrator? E autentificat? Ce actiuni relevante a efectuat utilizatorul in trecut?

1. *WHEN*: Ce actiune efectueaza utilizatorul in acest moment / ce eveniment are loc?

1. *THEN*: Ce ar trebui sa faca sistemul? Care este efectul asteptat?

Criterii de Acceptanta Gherkin

Considerand User Story-ul: Ca utilizator al produsului, vreau sa am acces la contul meu, ca sa pot sa lucrez

Scenariu: Utilizatorul introduce date de autentificare corecte / gresite
- CONTEXT / GIVEN: Utilizatorul e pe pagina de autentificare
- ACTIUNE / WHEN: Introduce credentialele si apasa butonul 'Autentificare'
- REZULTAT ASTEPTAT / THEN: E redirectionat catre pagina principala / ramane in pagina de autentificare si primeste o eroare

Nota: Observati ca nu oferim detalii tehnice (e.g. CSS, schema baza de date, ...)

Criterii de Acceptanta Gherkin

Considerand User Story-ul: **As a** student, **I want** to understand the subject in the class, **such that** I can learn effectively

Scenariu: Ma aflu in zona produsului referitoare la continutul cursului
- CONTEXT / GIVEN: Pe ecranul aplicatiei de predare online
- ACTIUNE / WHEN: Cand apas butonul de "Intrebare"
- REZULTAT ASTEPTAT / THEN: Pe chat-ul cursului e indicata dorinta mea de a exprima o intrebare

Criterii de Acceptanta Gherkin

Considerand User Story-ul: **As a** student, **I want** to understand the subject in the class, **such that** I can learn effectively

Scenariu: Ma aflu in zona produsului referitoare la continutul cursului
- CONTEXT / GIVEN: Pe ecranul aplicatiei de predare online
- ACTIUNE / WHEN: Cand apas butonul de "Intrebare"
- REZULTAT ASTEPTAT / THEN: Se aude un semnal sonor (sunet de clopotel) care sa ii indice profesorului ca unul dintre studenti are o intrebare

Criterii de Acceptanta Gherkin

Considerand User Story-ul: **As a** lecturer, **I want** to receive live feedback during the lesson, **such that** I can adjust my presentation

Scenariu: Predau cursul de Metode de Dezvoltare Software
- CONTEXT / GIVEN: Pe ecranul aplicatiei de predare online
- ACTIUNE / WHEN: Atunci cand lansez o intrebare catre studenti pe chat
- REZULTAT ASTEPTAT / THEN: Sa pot primi raspunsuri pe chat-ul aplicatiei
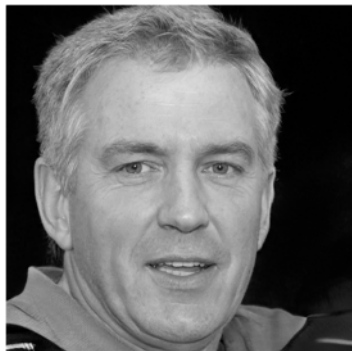
ANEXA

Personas - Maria

- Maria e studenta la Mate-Info la Bucuresti.
- Locuieste in Otopeni si ia in fiecare zi autobuzul 449 pana la Piata Presei, unde are legatura cu una din liniile 305, 331 sau 131 pana la Charles de Gaulles, de unde ia linia 2 de metrou pana la Universitate.
- Nu-i place sa stea la inevitabila coada pentru abonamente studentesti si e stresata ca in statia ei din Otopeni nu poate sa cumpere bilete.
- Nu-i place sa stea iarna in frig in statie, stiut fiind ca autobuzul respecta arareori programul.

Personas - Pavel

- Pavel este avocat, locuieste in Bucuresti in Drumul Taberei si merge cu masina frecvent la client.
- Este dependent de masina. I se pare ca traficul in Bucuresti este ingrozitor, iar parcarea este foarte stresanta.
- S-a saturat de amenzi de parcare si i-a fost ridicata masina de trei ori pana acum.

Example of a backlog

Open 6   Closed 0   All 6

Recent searches ⌄   Search or filter results...

Vote F.A.Q. question and answer.
#6 · opened 17 hours ago by Nicolae Murgu   F.A.Q

Submit Question for F.A.Q. list
#5 · opened 17 hours ago by Nicolae Murgu   F.A.Q

F.A.Q. information
#4 · opened 17 hours ago by Nicolae Murgu   F.A.Q

Display list of advices for prevention
#3 · opened 17 hours ago by Nicolae Murgu   Doing   Prevention

As a user with suspicion I want to select symptoms from a list to have an estimation of the risk to cary Covid-19 so that I know how to act
#2 · opened 23 hours ago by Nicolae Murgu   Symptoms

As a user I want to see differences between regular Flu and Covid-19 so that I don't freak-out for nothing
#1 · opened 23 hours ago by Nicolae Murgu   📅 May 29, 2020   Symptoms   To Do

Other examples of backlogs from last years:

Beer Finder: https://www.pivotaltracker.com/projects/2315099

Next course finder: https://www.pivotaltracker.com/n/projects/2315461

Parking Finder: https://www.pivotaltracker.com/n/projects/1978201

STB Finder: https://www.pivotaltracker.com/n/projects/1978171