User Stories and Use Case Diagrams

User Stories

As a <user role>

I want <goal>

so that <benefit>.

User Stories Goals

- Help deformalizing requirements
- Shift the focus from writing requirements to talking about them
- User story keeps the focus on the user and the reminds that there's an actual goal that has to be achieved by implementing a feature

User Stories Definition

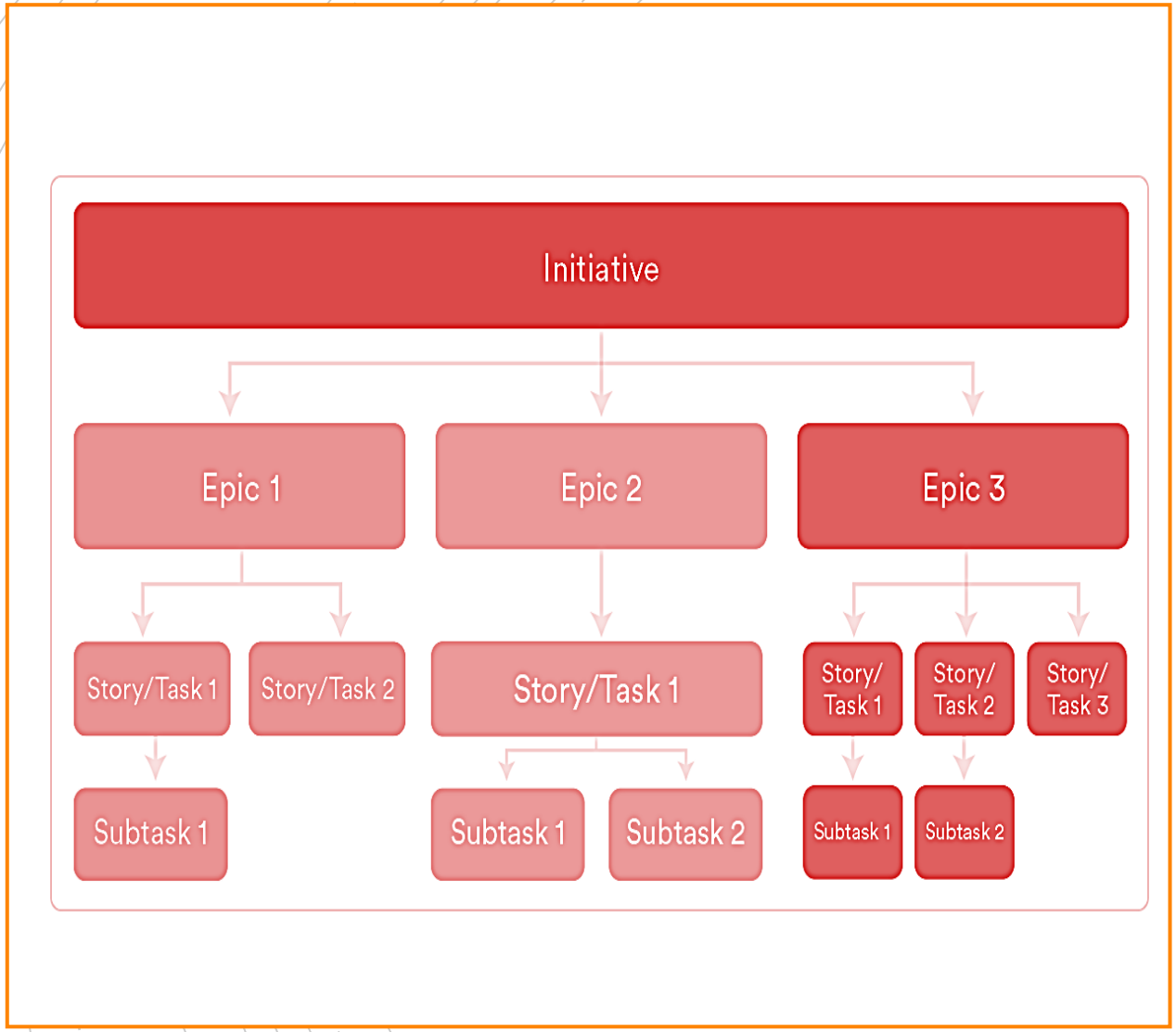
- Short, simple, general descriptions of a feature told from a specific perspective
- Perspective of a person who desires the feature. Usually user, customer or another stakeholder
- A user story should specify the end goal / the benefit / the value that the stakeholder will receive

User story template

“As a [persona], I want to [goal], so that [goal / benefit / value].” (1)

- Example: ***As a manager, I want to be able to understand my colleagues progress, so I can better report our sucess and failures*.**

- *Note: The stories are told from the perspective of an actual human, representing a group of stakeholders. USER STORIES SHOULD NOT BE TOLD FROM THE PERSPECTIVE OF ANOTHER SYSTEM OR SOMETHING SIMILAR*



User story charecteristics

- Can be written at different level of detail depending on the need.
- Most abstract stories are known as epics (1)

Epics

- Epics are typically large and since they lack details are split into smaller more detailed user stories

  "As a user, I want to be able to specify specific files, file types and folders to be backed up"

- User stories connected to an epic can skip the goal
- Additional details can be added by providing acceptance criteria for the user story

User stories and agile software development

- Anyone can write User Stories. Most likely though the authors are Product Owners, and business analysts
- The more important question is who participated for the discussions for the specific story
- They are written throughout the whole agile project development. Typically the epics are written initially and then decomposed to smaller once
- User stories are not suitable to communicate and capture technical details and requirements

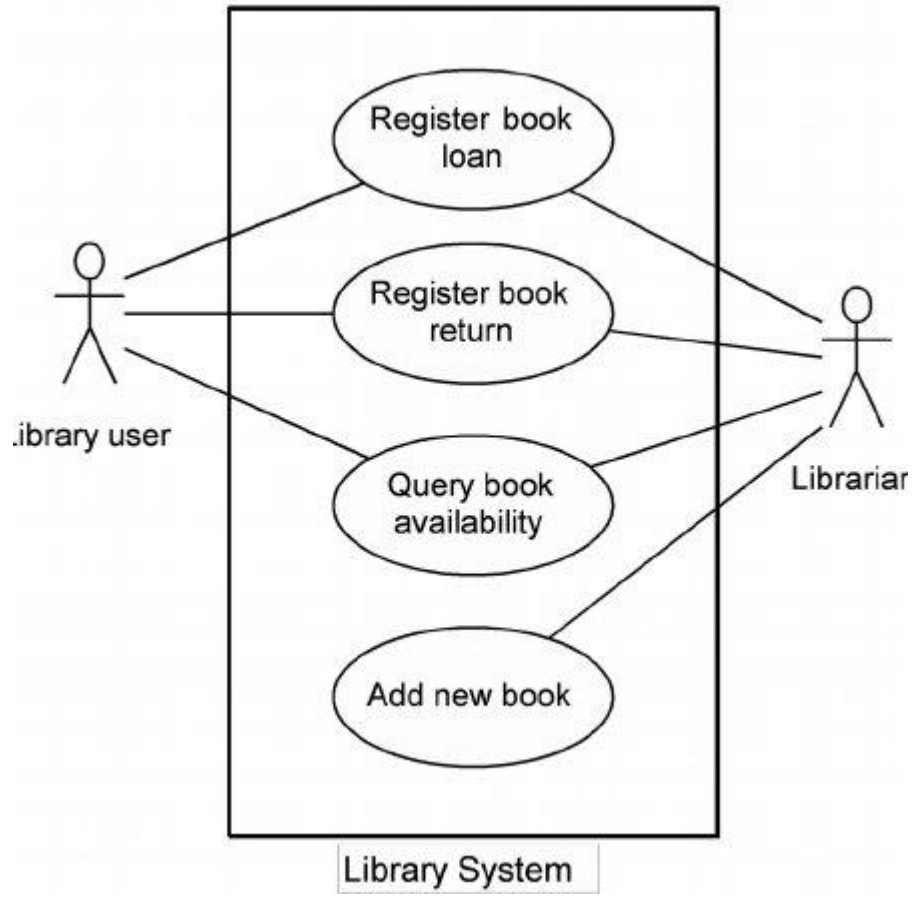
User stories and Software requirements

- User stories can be based on another formalisms as requirements documents, use cases and use case scenarios
- User stories do not prevent the need for writing standard software requirements. Typically, they are incomplete and lack some needed details for the implementation.
- User stories may point to actual requirements, diagrams or other techniques used for specifying and modelling of requirements.

Usage

- Hard to use for projects that were started with a non-agile methodology of development, even if they were migrated to an agile one. Mostly because non-agile artifacts are hard to be combined with purely agile once.
- User stories are often used as the main technique for specifying requirements for smaller agile based projects. For medium and large projects they are typically combined with other approaches.
- User stories are not used when writing proposals to clients for earning future projects. They are used only in the development process and prior to starting it.

Use Cases


Register book loan
Register book return
Query book availability
Add new book
ibrary user
Librariar
Library System

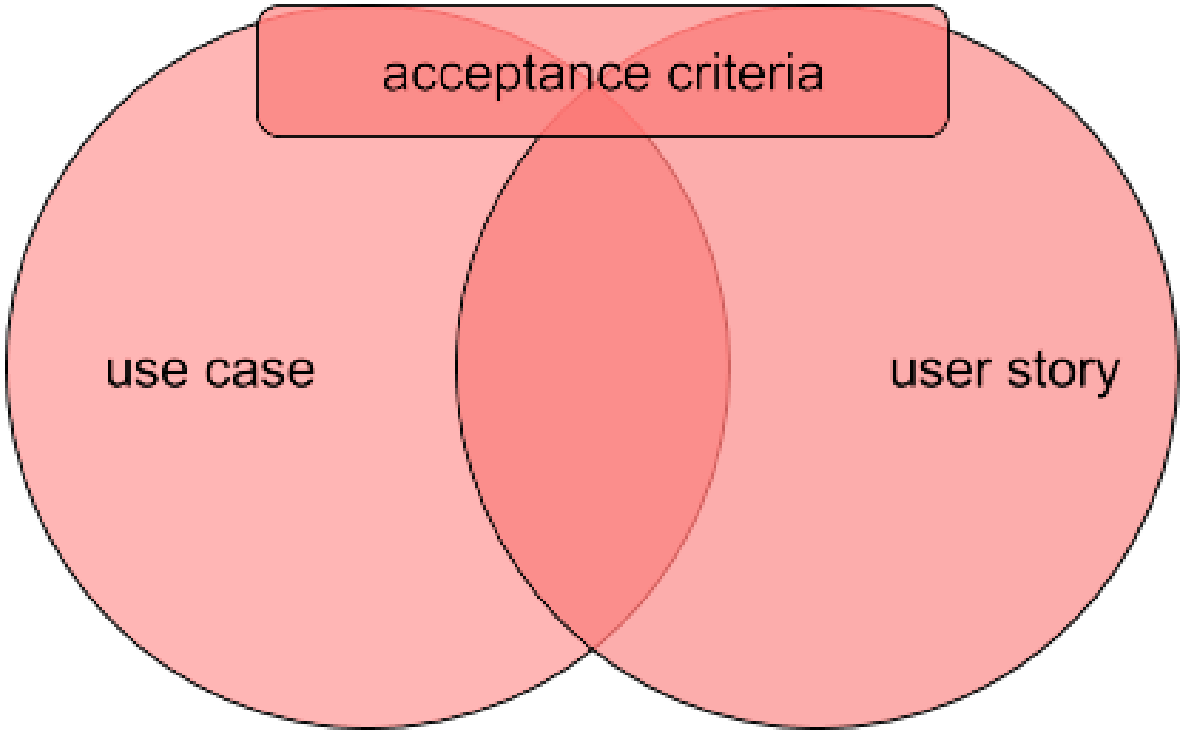
user story

- ✓ BRIEF AND SIMPLIFIED DESCRIPTION
- ✓ ENCOURAGES CREATIVITY AND DISCUSSION

use case

- ✓ MORE COMPLETE
- ✓ HIGHER LEVEL OF DETAIL
- ✓ MORE CONCRETE

users



What I want to do/the problem I have

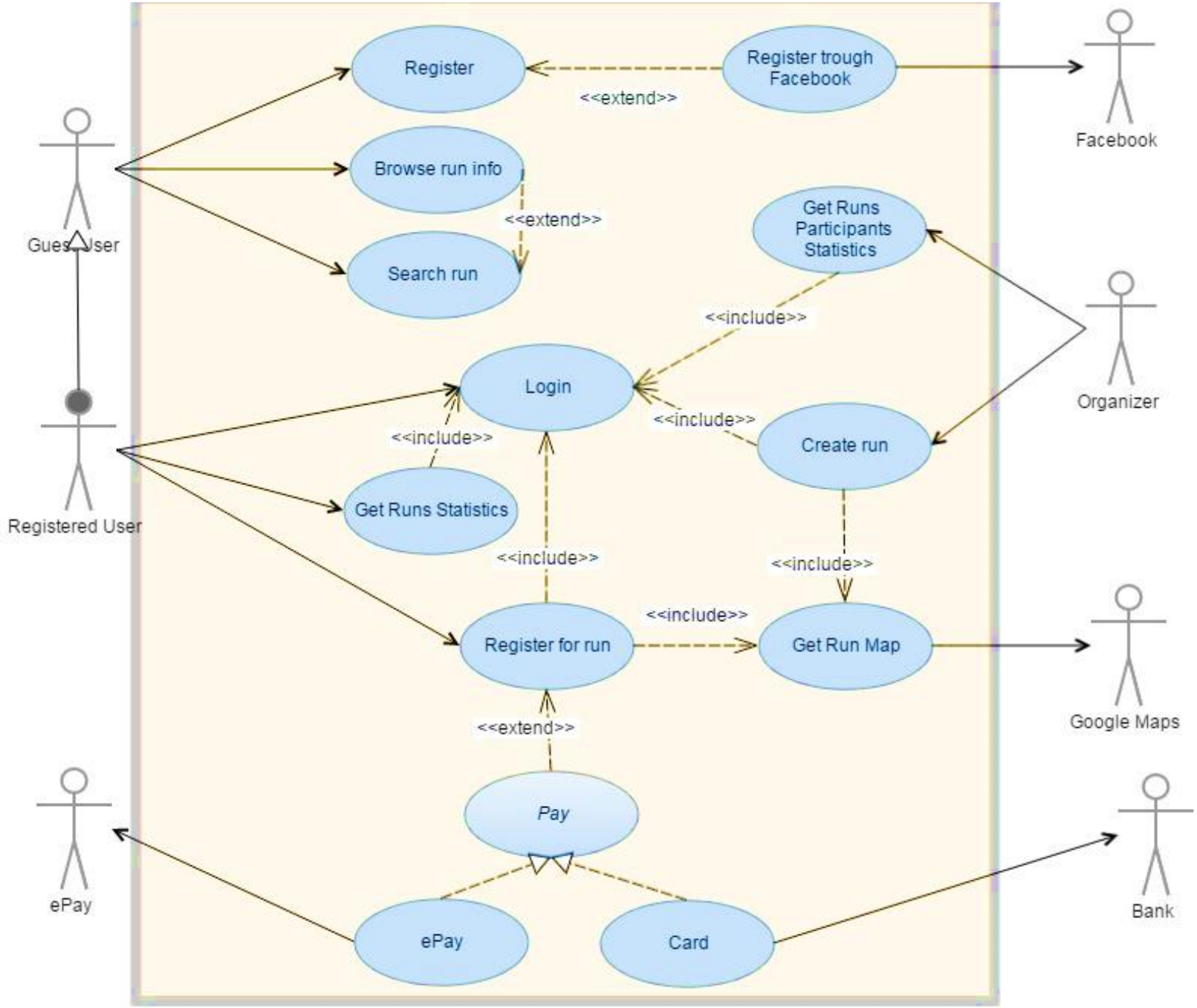
How the system solves it

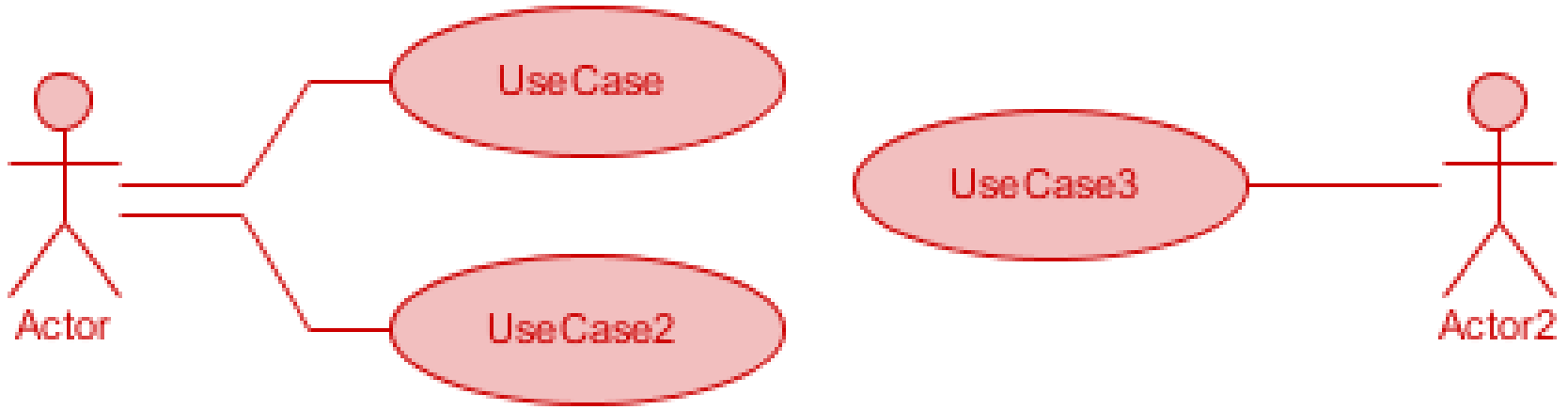
devs

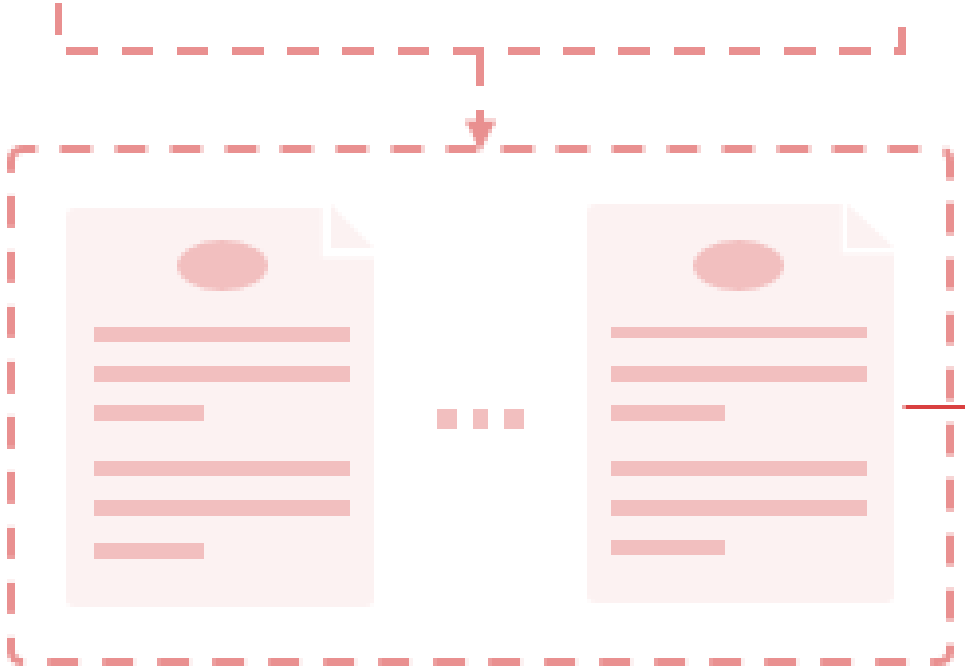
Пример Use Case Диаграма

Софтуерна система „**Happy Healthy People**“ позволява на запалени бегачи да търсят и да се включват в състезания и маратони. Системата има следните изисквания:

- Нерегистриран потребител може да търси маратони и състезания и да разглежда информация за тях.
- Системата изисква регистрация, като това е възможно и чрез **Facebook** акаунт.
- Регистриран потребител - организатор на дадено състезание трябва да може да създава състезание като предоставя информация и задължително карта, като за целта системата се свързва с **Google Maps**.
- Регистриран потребител може да се записва за даден маратон или състезание, като в някои случаи записването включва и плащане.
- Системата поддържа следните начини за плащане – с карта или чрез **ePay**.
- Системата трябва да предостави на регистриран потребител карта на дадено състезание, за което се е записал като се свързва с **Google Maps**.
- Системата трябва да може да предостави на регистриран потребител статистика на участията му в различни състезания.
- Системата трябва да може да предостави на регистриран потребител-организатор статистика за участниците в дадено състезание.


Register
Register trough Facebook
<<extend>>
Facebook
Browse run info
<<extend>>
Search run
Guest User
Get Runs Participants Statistics
<<include>>
Organizer
Login
<<include>>
<<include>>
Create run
Registered User
Get Runs Statistics
<<include>>
<<include>>
<<include>>
Register for run
Get Run Map
Google Maps
<<extend>>
Pay
ePay
ePay
Card
Bank





Use Case Name

- Description
- Pre-condition
- Post-condition
- Basic path
- Alternative paths
- Exception paths

Use Case Name	Deposit Funds
Assumptions	The actor has been authenticated so the user and card number are already known to the system.
Pre-conditions	The user has permission to use this feature.
Initiation (Triggering event)	"This use case starts when..." The actor chooses this option
Main flow of events	1. Use case provides a list of the actor's accounts and asks, "Which account do you want to deposit funds into?" 2. The actor selects an account. 3. The use case asks "How much?" 4. The actor enters the deposit amount. 5. The use case asks the actor to provide the deposit slip and funds. 6. The actor provides the deposit slip and funds.
Exceptional flow of events	[Omitted from this example to save space]
Post-conditions	The transaction is registered in the daily activity log.

Additional Materials

1. https://www.atlassian.com/agile/project-management/user-stories
2. https://www.visual-paradigm.com/guide/agile-software-development/what-is-user-story/
3. https://www.romanpichler.com/blog/10-tips-writing-good-user-stories/
4. https://www.agilealliance.org/glossary/user-stories/#q=~(infinite~false~filters~(postType~(~'page~'post~'aa_book~'aa_event_session~'aa_experience_report~'aa_glossary~'aa_research_paper~'aa_video)~tags~(~'user*20stories))~searchTerm~'~sort~false~sortDirection~'asc~page~1)