Main Project

Software Engineering II

3/11/2022

Version 1.0

Product Owner and Scrum Master

- Can be contacted at (almost) any time on Telegram
  - Answers will come typically during "office hours"
- PO (response to stories link)
  - Clarification on stories
  - Discussion during planning
- Scrum master (response to key concepts reminder)
  - How to work
  - What can (not) be done

Daily Scrums

- Perform "daily" scrum
    - at beginning of new work session or
    - beginning of lecture
      whichever come first
    - Anytime you can meet together

- Record spent time on scrum meeting on YouTrack

Time budget

- Roughly 6 person-hours per team member per week
- Sprint duration: 2 weeks
- Effort budget per sprint
    - 60 hours for 5-members teams
    - 72 hours for 6-members teams
    - 84 hours for 7-members teams

Estimation and planning

- All stories entered in a new project board
- One third of stories estimated
  - Story points
- Planning for the first sprint
  - Sprint started
  - Stories selected assigned to the sprint
  - All tasks estimated in hours
  - Keep in mind your time budget

- By Tuesday 8 November everything available on YouTrack board

Share information on your repositories

- On the shared Google sheet https://tinyurl.com/se2polito
  - By Tuesday 8 November columns YouTrack and Github must be filled
  - You will insert data on Docker and Sonar Cloud after the respective workshops

Deadlines and requirements – part 1

- Tue Nov 8 - Estimation of 1/3 of stories and first sprint planning
  - Youtrack and Github repositories shared on https://tinyurl.com/se2polito
- Mon Nov 14 – Demo 1
- Mon Nov 28 – Demo 2 – Release 1
  - The release consists in providing a Docker container with all the software
    - Plus instructions on how to start and use the system
    - Must contain the full deployment
  - Docker repository shared on https://tinyurl.com/se2polito
  - Docker container deployable by third parties
  - Estimation of 2/3 of stories

Deadlines and requirements – part 2

- Mon Dec 12 – Demo 3
  - Sonar cloud repository shared on https://tinyurl.com/se2polito
  - Sonar cloud analyses performed and track of TD management
  - Estimation of all stories
- Mon Jan 9 – Demo 4 – Release 2
  - Docker container deployable by third parties
  - Sonar cloud analyses performed and track of TD management
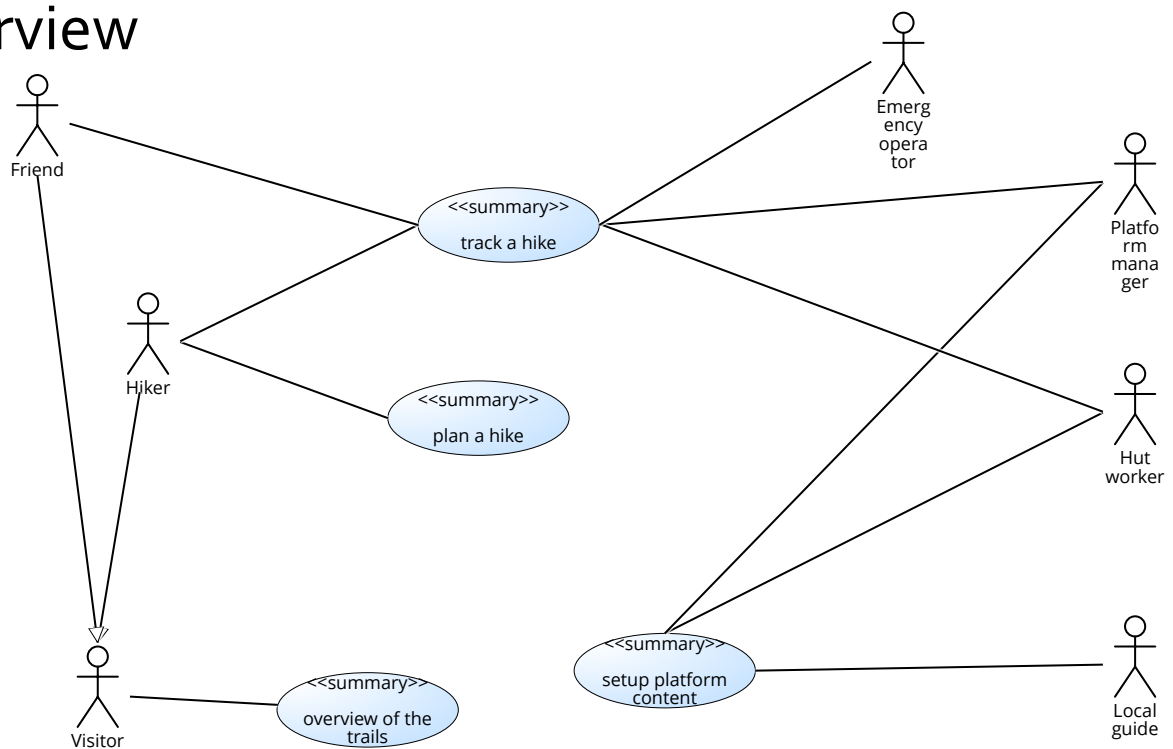
Hike Tracker

Hike Tracker 🏔️

- Application for
  - promoting hiking activities in the mountains
  - fostering group activities through collaborative track of hikes
  - leveraging the network of mountain huts
  - ease safety operations in case of incidents/emergencies

- With *non-profit* goal

Users

- Visitor (i.e., any user not registered to the application)
- Hiker
- Friend
- Local guide
- Platform manager
- Hut worker
- Emergency operator

Overview

Constraints

- System must be accessible through:
  - regular web browsers
  - smartphones
  - tablets
- The system must be cross-platform

Test data

- You will have to create test data with available information on the web
- Teams can collaborate and share test data, if you wish
- Data format for a hike:
  - Title/label
  - Length (kms)
  - Expected time
  - Ascent (meters)
  - Difficulty (Tourist, Hiker, Professional hiker)
  - Start point *
  - End point *
  - Reference points *
  - Description

- Point can be: address, name of location, GPS coordinates, hut, parking lot

Virtual clock and position simulator

- Since the system works over periods of time, a virtual clock must be available for testing purposes
  - Virtual clock must let the tester fast-forward time.

- GSP positions can be simulated by selecting points in the trail tracks
  - Usually trail tracks are available as gpx files. Examples:
    - https://hikerspiemonte.it/download/2140/
    - http://vallevaraitatrekking.it/tappe/becetto-rifugio-bagnour/
  - Examples of hikes :
    - https://hikerspiemonte.it/sentiero-per-il-rocciamelone/
    - https://www.bielointothewild.com/rocciamelone-3-538-m-hiking-piedmont-legendary-peak/
    - https://www.komoot.com/smarttour/e933899326/ascesa-al-rifugio-savona-giro-ad-anello

Product backlog

- Stories are already in priority order, the most valuable is the first one
- Import the provided file by following the You Track tutorials
  - From XLSS or Google Sheet:
    - https://www.jetbrains.com/help/youtrack/cloud/import-from-xlsx.html#setup-procedure
  - From csv file:
    - https://www.jetbrains.com/help/youtrack/cloud/import-from-csv.html