

Requirements

Workshop 4

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Today's Workshop

- Requirements case study (30mins)
- Discussion (10mins)
- Requirements for your game (60mins)



Running app – brief from SittingPlace Enc. CEO

The **SittingPlace office group** wants to encourage its **employees** to be more physically active. In an interview, the **company CEO** said:

*“The company will provide bonus points to **those who use** this jogging app, as it will reduce our costs from the employee sickness and stress. The app will allow the employees to jog to work instead of driving, so we will encourage jogging to and from work, if our employees want to.*

We also hear that our employees (as they live at various locations and distances away from the company) are worried that they will not have safe running path to take part in the program or that the distance is too long for them.

So, the app needs to help with this. Where the distance is too long, maybe they can take a ride on bus or tram and then run. That’s all fine, as long as they run some distance, we are happy. Obviously the longer they run the healthier it is for

I myself have tried this idea out. I run 3 days a week. So, I have planned several run paths for good days (good with weather and time, I mean) I run the whole distance from home and back. But on wet days my driver picks me up in the mornings and I take bus to the park halfway home and run back only part of the distance. But it works. So, we want to have an app like that.”

Requirements Case Study:



can use this
online tool:

<https://www.umlletino.com/>
[umlLetino](https://www.umlletino.com/)

Working in your group:

1. Identify the stakeholders for this app
(5 min) -> highlighted yellow : containing system

1. The system: people who created and maintain the apps

2. The wider system: people who benefit from the app improving : eg:
health board , transport system, other people on the buses/public
transport

2. Write 3 user stories for this app (5 min)

As a << CEO>> I want to << encourage employees to use the app / run more >> so that << they are healthier and less stressed >>

As a << employee>> I want to << use the app >> so that << I can get bonus points >>

As a << employee>> I want to << use the app >> so that << I can plan my running path>>

As a << data regulator>> I want to << use the app >> so that << I can know the safety features of privacy (consent)>>

As a << negative user >> I want to << not use the app >> so that << I don't have to run a long distance >>

As a << transport provider >> I want to << update the app >> so that employees can have an accurate representation of the transport>>

1. Select one User Story and write a Use Case specification (use case steps) for it

Actor: employee , APP

2. Discuss with another peer group: Why you may wish to use (or not to use) use cases, user stories, or their combinations (15 min).

3. **Homework:** draw a Use Case diagram for this app

Employer -> CEO

1. System display option pop up
2. Specific sign in for CEO
 1. Alternative flow : /forgottenincorrect sign in options
3. Write in the different parameters
4. System check database for existing user / if user is specifically admin based
 1. If unused user name, offer a way to sign up
5. System displays user's information
6. User can split the system by departments of the users

Log in to sign up
Enter information
Determine as staff
Ability to show the specific information only for
Show dashboard
System connects to database

!! User stories , is a general statement
!! (refining of general statement) Use case
gives concrete steps and exact steps needed
to show/ use the app { interaction : app x user}

Requirements for your game

Working in your group:

1. Identify the **stakeholders** for your game (5 min)
2. Assign stakeholder roles within the team and write **user stories** for your game from these stakeholders' perspectives (**2 per team member**). Discuss the user stories (15 min)
3. Choose **one** user story and write a **use case specification** for it (10 min)
4. **Discuss with another team** what roles/user stories each team has, what can you learn from each other and what is the utility of user stories/use cases? (15 min)
5. Commit the **stakeholder list** and **Use Case specification** to your **git** repository under a Requirements section (5 min)

stakeholders

- Developer (us)
- Users
- Teachers marking it
- Negative stakeholder
- Original creator (original)

As a << Developer>> I want to << have a twist in the game>> so that << the game is more fun and unique >>

As a << User>> I want to << understand the game instructions >> so that << I can play the game intuitively >>

As a << teacher>> I want to << be specific>> so that << I can mark the game accurately to the marking scheme >>

As a << negative stakeholder>> I want to << find some bugs and difficulties in this game>> so that << I can provide some feedbacks for developers and earn money from them>>

As a << original developer>> I want to << protect my intellectual property>> so that << I can protect my property>>

User story : user :As a << User>> I want to << kill the zombies and win the round>> so that << I can have fun >>

login use case

System shows: Login page display

User enter : in log in parameters

System checks: checks the paramters with the
existing users

if it existing, match the game log in
with their account. Else show page for new log
in / register account

playing user case

(entered main page of game)

Show the details of user's game (levels/
existing highscore/ start game button)

User clicks onto the start game button
(entered start game loading page)

System showing instructions of game
, there is a level button (bottom left/ healthbar
+ hp bar on top left)

User starts playing using WASD

System creates more zombies zoning into the user

Character continuously shooting bullet, moving around around
according to the user's button input

Once moving and killed zombie, user walks to the gems to collect
and system displays increase hp . System display health
decrease if user attacked by zombie

System displays hp to be full (indicator of entering next level
system needs to know that we need to go to next level). Will
display weapon upgrade page

User to choose upgrade

System to implement upgrades

System display next level page

System needs to reset the different bars

Repeat till end of game (same)

End of game

Show congratulation page

Show timer of how long it took to complete level 2

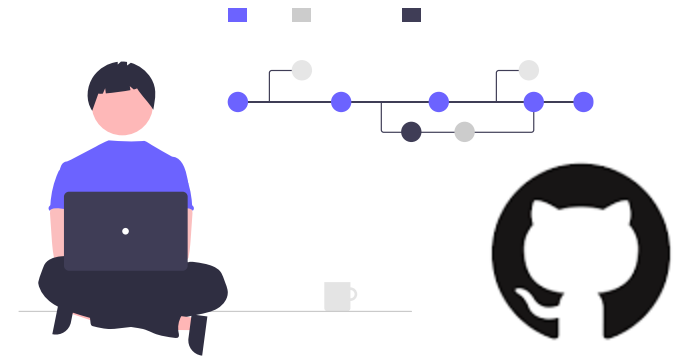
System displays timing onto the scoresheet (if higher , put on top, else place below , if first time playing, place timing in middle, highlight the current game score using border) [show timing next to name , do not overwrite , show existing scores to highlight improvement]

System display back to original page showing the login

- New game

homework / groupwork

- Add a requirements section to your Github repo that includes:
 - Stakeholders
 - Add your user stories to the Kanban board
 - The worked through use case specification
 - A Use Case diagram for your game
 - A brief (up to 300 words) **Reflection** on what your team learned on user story/use case use



Summer Project Drop-in

- **Tomorrow!**
Tuesday 13th February 1pm – 2pm,
Ivy Gate G01
- Also, next week:
Tuesday 20th February 1pm – 2pm,
Ivy Gate G01
- Come along to discuss group formation,
individual supervisor choice, find team-
mates or if you have general questions.

