## Plan Iteration 1

Indoor football strategy simulation



Alex Lievense	Project leader	alexlievense@gmail.com
Tsvetelina Chantalieva	Team member	cvetyx@gmail.com
Kheir Almosally	Team member	almosally.mhd@gmail.com
Nguyen Viet Hai	Team member	hainv201@gmail.com
Nguyen Thi Thu Thao	Team member	thuthaovinh@gmail.com
Nguyen Dinh Thanh	Team member	thanhf98@gmail.com

## **Features**

The project team will create a working application during the first iteration that will contain the following features:

- Simulation:
  - o Simple AI:
    - The players must always chase the ball.
    - The goalkeepers must move up and down their goal.
  - Physics:
    - The players must move around the field naturally.
    - When the ball hits a goalkeeper, it should bounce back.
    - The players and ball have a direction, speed and acceleration.
- GUI: (Kheir)
  - The user can navigate between the 'Simulation' and the 'Strategy Management' section.
  - Strategy management:
    - the user can select the formation of a team. The formation should be drawn in a picturebox inside the form.
    - the user can give the strategy a name.
  - Simulation input:
    - the user can select the formation for the Home Team and the Away Team.
    - the user can select how many times the match should be simulated.
  - When the simulation is running, the match must be visualized in an UpdateWindow. The UpdateWindow is part of a library that helps integrate the Monogame framework into Windows forms.
  - When the simulation has ended, the result should be shown to the user.

## Work division

Feature	Assignees
The players must always chase the ball	Thao, Tsvetelina, Viet Hai
The goalkeepers must move up and down their goal	Thao, Tsvetelina, Viet Hai
The players must move around the field naturally	Alex, Thanh
When the ball hits a goalkeeper, it should bounce back	Alex, Thanh
The players and ball have a direction, speed and acceleration	Alex, Thanh
The user can navigate between the 'Simulation' and the 'Strategy Management' section	Kheir
The user can select the formation of a team. The formation should be drawn in a picturebox inside the form	Kheir
The user can give the strategy a name	Kheir
The user can select the formation for the Home Team and the Away Team	Kheir
The user can select how many times the match should be simulated	Kheir
When the simulation is running, the match must be visualized in an UpdateWindow. The UpdateWindow is part of a library that helps integrate the Monogame framework into Windows forms	Alex, Thanh
When the simulation has ended, the result should be shown to the user	Alex, Thanh