

# TDT71 Game Development

General information about the  
content, goal and agenda

**- Lecture starts at 10:15-**

# About me...

- ✦ Position: Professor, Co-founder Kahoot!/PlayPulse/BitPet
- ✦ Email: [alfw@idi.ntnu.no](mailto:alfw@idi.ntnu.no) / P: 735 94485 / IT-020
- ✦ Research interests: Game-based Learning, ExerGames, Game development, Game Technology, Software Engineering
- ✦ Life: Church(band music), Music, Cycling, Games
- ✦ Family: a wife and 3 daughters

# Course information

- **Responsible:** Alf Inge Wang
- **Work load:** 3,75 SP
- **Syllabus:** Various articles from journals, proceedings and magazine.
- **Teaching approach:** 3 workshops where the students present the articles.
- **More info:** Look at [ntnu.no/wiki/display/tdt71](http://ntnu.no/wiki/display/tdt71)

# Course goal

- The course is an introduction to:
  - Games, history and players
  - Use of games to motivate/engage
  - Game development

# Course syllabus

## An overview

- Main topics:
  - Games, history and players: 4 articles (86 pages)
  - Engagement and Motivation: 4 articles (47 pages)
  - Game Development: 4 articles (42 pages)
- Number of pages: 175 pages in total
- Get the articles:
  - Download PDF from TDT71 from [ntnu.no/wiki/display/tdt71](https://ntnu.no/wiki/display/tdt71)

# Syllabus: Games, history and players

(86 pages)

- Mark Overmars, “*A Brief History of Computer Games*” (35p)
- Holin Lin and Chuen-Tsai Sun, “*Massively Multiplayer Online Role-Playing Games (MMORPGs)*” (7p)
- Carsten Magerkurth, Adrian David Cheok, Regan L. Mandryk, and Trond Nilsen, “*Pervasive Games: Bringing Computer Entertainment Back to the Real World*” (19p)
- Juho Tamari and Janne Tuunanen, “*Player Types: A Meta-synthesis*” (25p)

# Syllabus: Engagement and Motivation (47 pages)

- Tom W. Malone, *“What makes things fun to learn? Heuristics for designing instructional computer games”* (8p)
- Penelope Sweetser and Peta Wyeth, *“GameFlow: a model for evaluating player enjoyment in games”* (not Section 4) (14p)
- Alf Inge Wang et al., *“The effect of points and audio on concentration, engagement, enjoyment, learning, motivation and classroom dynamics using Kahoot!”* (10p)
- Alf Inge Wang et. al, *“Evaluation of the Game Exermon - a Strength Exergame Inspired by Pokémon Go”* (15p)

# Game development (48 pages)

- Penelope Sweetser and Janet Wiles, *“Scripting Versus Emergence: Issues for Game Developers and Players in Game Environment Design”* (9p)
- David Callele, Eric Neufeld, Kevin Schneider, *“Requirements Engineering and the Creative Process in the Video Game Industry”* (13p)
- Alf Inge Wang and Njål Nordmark, *“Software Architectures and the Creative Processes in Game Development”* (14p)
- Rabail Tahir and Alf Inge Wang, *“Codifying Game-based Learning: The LEAGUE framework for evaluation”* (6p)



# Organization: Three workshops

- **Games, history and players**

Wednesday 8th of September 10:15-12:00 Zoom

- **Engagement and motivation**

Wednesday 15th of September 10:15-12:00 Zoom

- **Game development**

Wednesday 22nd of September 10:15-12:00 Zoom

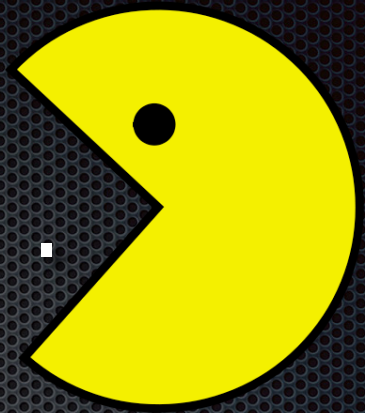
- The students present the papers in the course in 10 minute presentations

- Group problem, discussions & quiz

# Your assignment

- ✦ Choose one of the papers from the syllabus to present
  - ✦ Max 10 minutes presentation
  - ✦ Create at 5 multiple-choice questions for Kahoot! from the paper with four answers (one or more correct)
    - ✦ Send questions to [alfw@idi.ntnu.no](mailto:alfw@idi.ntnu.no)
- ✦ Present your paper at one of the workshops!

# Summary



- Examination:
  - **Thursday 2nd or Friday 3rd of December**
- Questions?