



Norwegian University of
Science and Technology

TDT71 Game Development

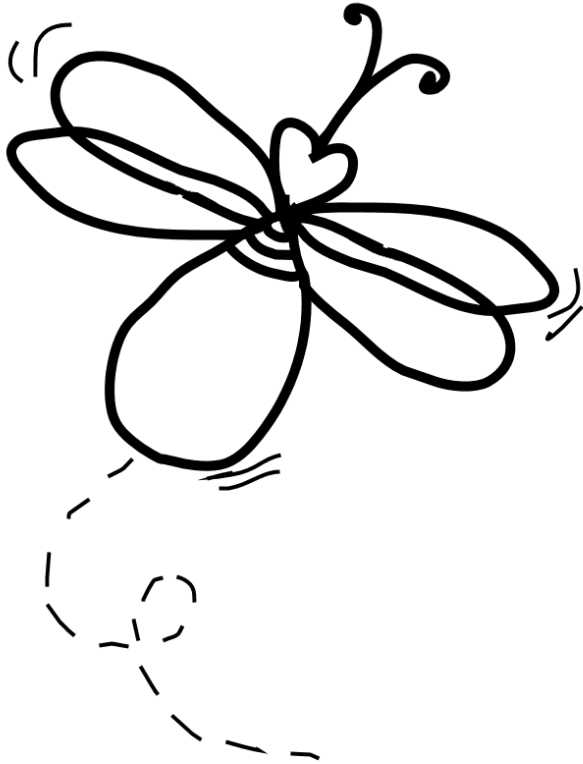
Course introduction

Professor Alf Inge Wang

Lecture starts at 14:15



Agenda



- ✓ About me...
- ✓ course information
- ✓ course goal
- ✓ syllabus
- ✓ organization
- ✓ Assignment



About me...

- **Name:** Alf Inge Wang
- **Office:** IT-020
- **Phone:** 73594485
- **Email:** alfw@idi.ntnu.no
- **Position:** Professor in Game Technology
- **Private interests:** Family life (1 wife + 3 daughters), Church, Band, Video Games, Jogging, Biking



My background

- **Short summary:**

- 1983: Discovered how to program!
- 1993: Bachelor Degree: Micro Electronics
- 1995: Master Degree: Software Engineering
- 1996: Researcher SINTEF/NTNU.
- 2001: PhD Degree: Software Engineering
- 2001-2003: Post doc.
- 2003-2012: Associate professor
- 2012- ... Professor in Game Technology
- 2012-... Inventor/Co-founder Kahoot! (kahoot.com)
- 2017-... Co-founder PlayPulse (playpulse.no)
- 2020-... Inventor/Co-founder BitPet (bitpet.io)

- **Research:** Game-based Learning, Game Technology, Mobile Computing, Education, ExerGames, Software Engineering, Software Architecture



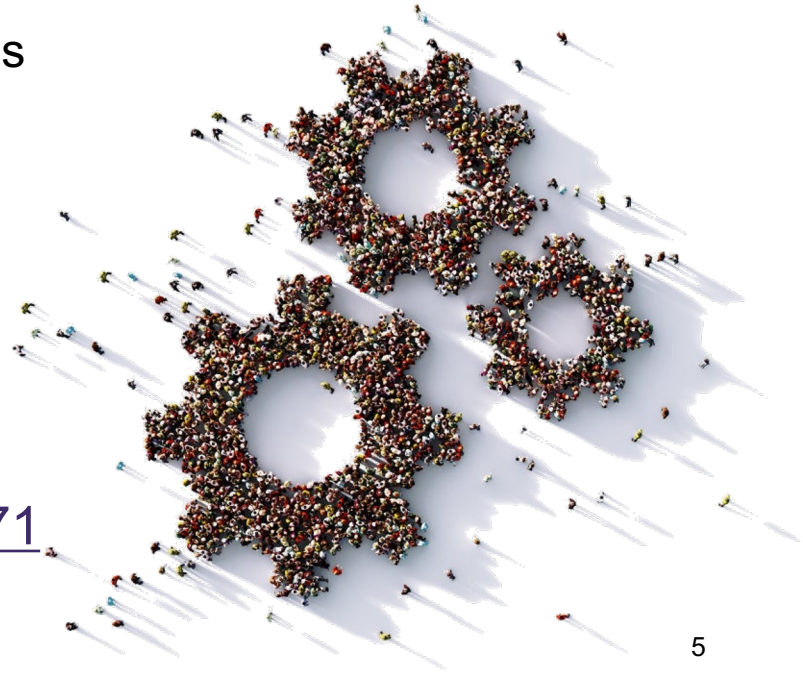
Kahoot!

 **playpulse**

BITPET

Organisational information

- **Lecturer:**
 - Alf Inge Wang, alfw@idi.ntnu.no, 7359 4485, IT-020
- **Teaching approach:**
 - Students present the articles in workshops
- **Workshops:**
 - Wednesdays 14:00-16:00 (Zoom)
 - 14/21/28.september
- **Workload:** 3,75 SP
- **Syllabus:** Research articles
- **Grade:** Essay
- **More info:** <http://ntnu.no/wiki/display/ttd71>



Course goal

- Introduction to:
 - Games, history and players
 - Use of games to motivate/engage
 - Game development



Syllabus overview

- Main topics:
 - Games, history and players: 4 articles (86p)
 - Engagement & motivation: 4 articles (47p)
 - Game development: 4 articles (42p)
- Total number of pages: 175p
- Get articles:
 - Download from <http://ntnu.no/wiki/display/tdt71>



Syllabus: Games, history and players

- 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

- 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)



Syllabus: Game development

- 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)



Your assignment

- Choose one of the papers from the syllabus to present
 - Sign up for paper on the wiki-page for the course
 - Max 10min presentation
 - Present your paper at one of the workshops
 - Participate on the workshops!

