

COURSEWORK

F28WP WEB PROGRAMMING

2020-2021

COURSEWORK

- Worth **50%** of the course
- Group project
- Managed and developed on GitHub
- 11 weeks work
- Submission date: **3:30pm Local Time**

COURSEWORK DEMONSTRATE

- Understanding, Knowledge and Cognitive Skills Scholarship, Enquiry and Research (**Research-Informed Learning**)
- **Broad** knowledge and understanding of the **history** of web programming
- The ability to apply the concepts, patterns and architectures used in web programming to **new problems**
- Detailed technical skills to use a scripting language for both **server side** and **client side** programming
- The ability to make **informed decisions** about appropriate web technologies to use for a particular task

SUBMISSION

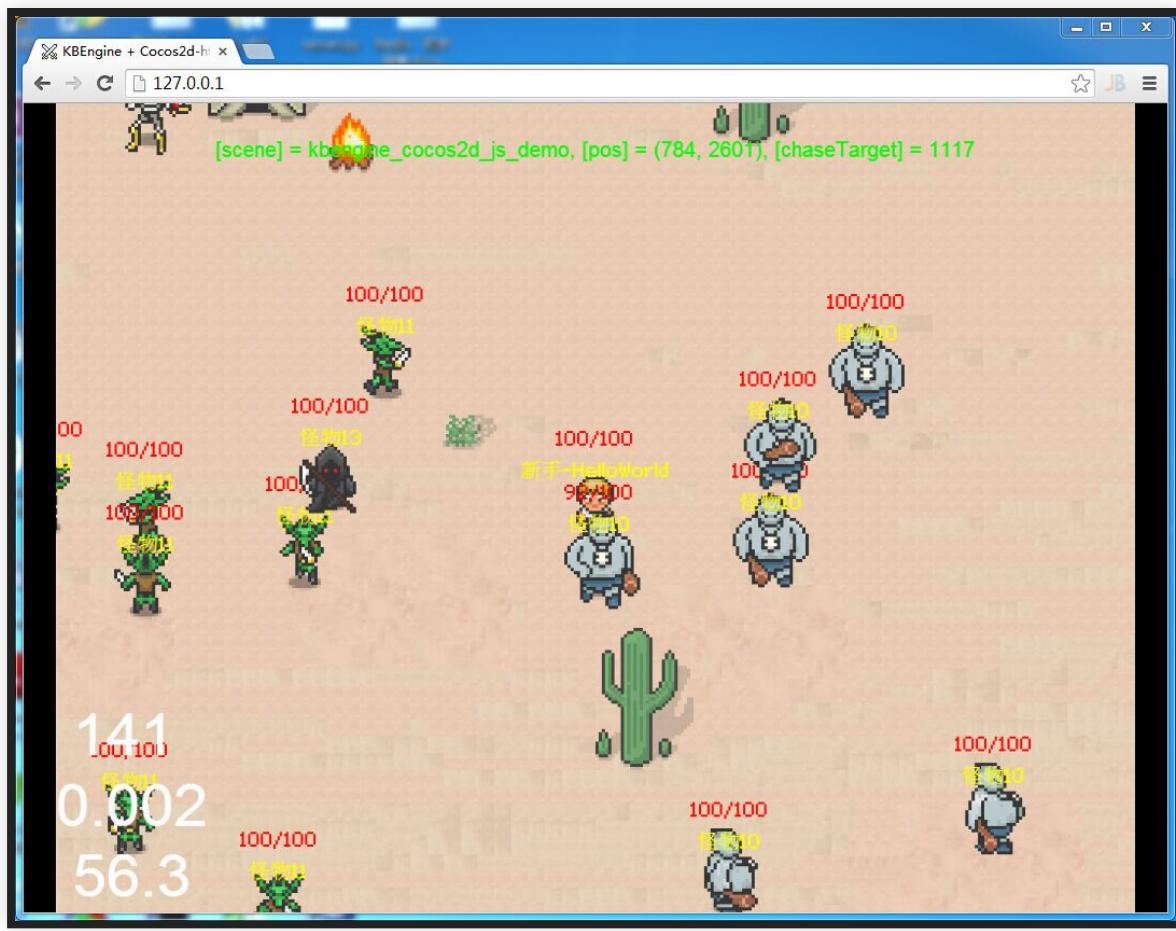
Final Submission will be Online Vision [link](#)

- ZIP of all assets and work from the GitHub repository
- 2 Page report for each student

COURSEWORK TOPIC

- Massively Multiplayer Online **Game** (MMOG)
- **Client-Server** Management
- User **interact** with the game and other players
- Manage complexities and problems
 - (Security, Data, Conflicts, Cooperation, ..)

EXAMPLES/IDEAS



EXAMPLES/IDEAS





Contra
Version 1.2.0 2010
Visit NESMapper.com for maps,
roms and jammers for the NES.
Paypal: nesmapper@juno.com
Feel free to send a donation to
help support the creation of more
maps for classic NES games.



Force Field Falcon
Machine Gun Falcon
Fire Ball Falcon
Rapier Falcon
Laser Falcon
Sword Gun Falcon
Mass Destruction Falcon



EXAMPLES/IDEAS



SCORE
0

AMMO
48

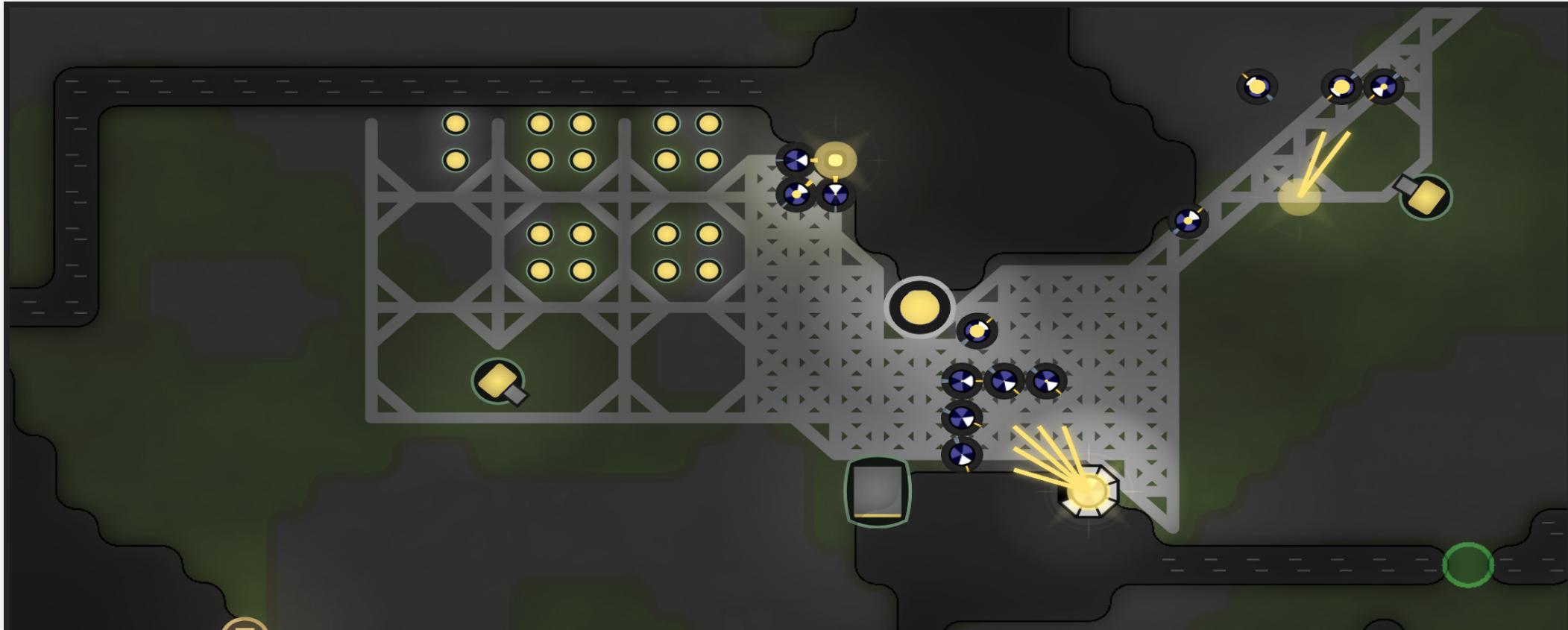
MINES

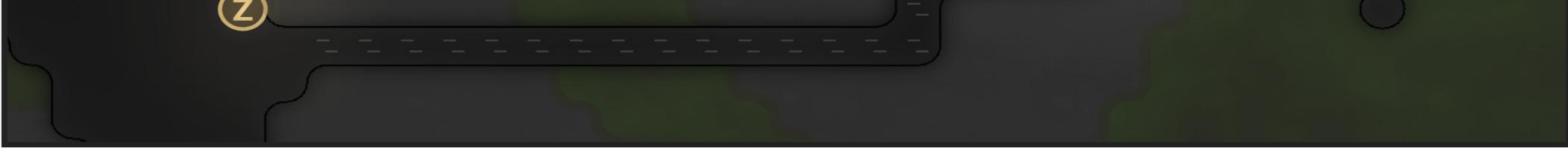
5

S

H

EXAMPLES/IDEAS





EXAMPLE JAVASCRIPT GAME & SOURCECODE

Open Source Projects (GitHub)

- Clumsy Bird Game (Source)
[<https://github.com/ellisonleao/clumsy-bird>]
- Hextris Game (Source)[<https://github.com/Hextris/hextris>]
- Pacman Game Source
- Astray Game Source
- Racer Game Source
- Mortal Kombat Game Source

EXAMPLE JAVASCRIPT GAME & SOURCECODE

Open Source Projects (GitHub)

- Browser Quest (Multiplayer Game) [GitHub Home](#)
- Freeciv-web Strategy Game [GitHub Home](#)

EXAMPLE JAVASCRIPT GAME & SOURCECODE

Open Source Projects (GitHub)

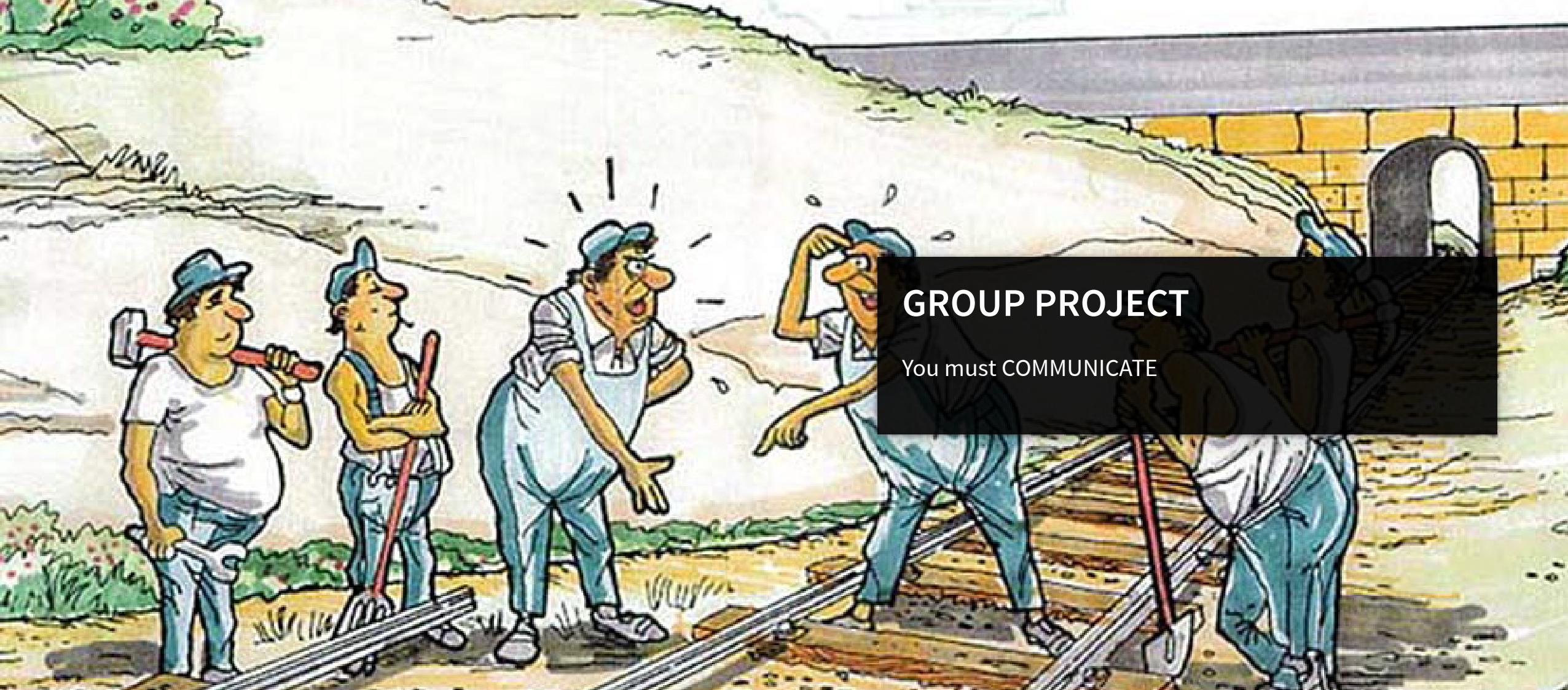
- kbengine_cocos2d_js_demo (MMOG) [GitHub Home](#)

THINGS TO CONSIDER

- Performance/optimization problems
- Reliability
- Network delays/disconnections
- Security (data/privacy)
- Cheating
- Scaling (complexities/number players)
- Different browsers
- Usability
- Project management (e.g., bugs, code quality, team work, ..)

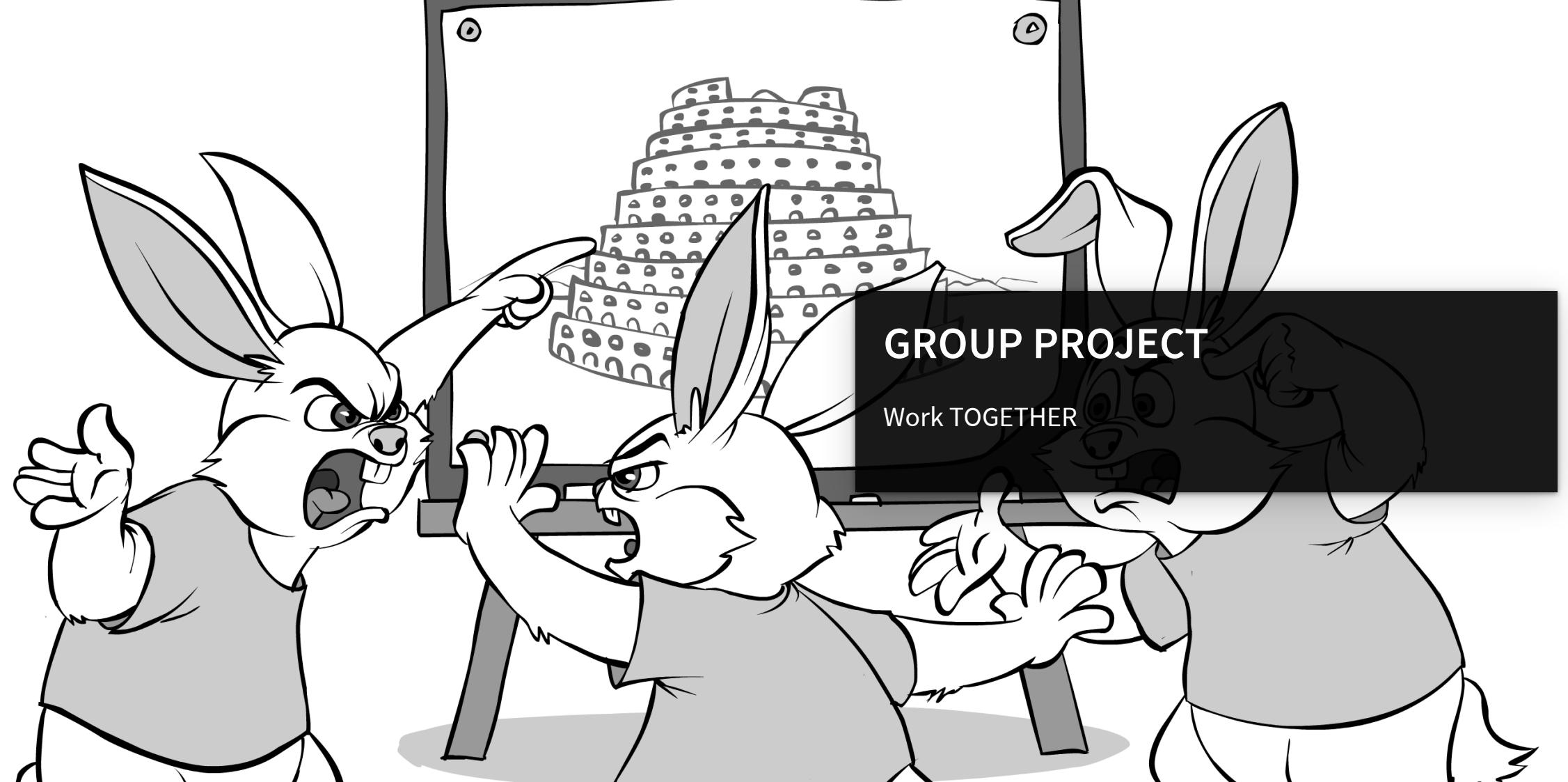
GROUP WORK

- What isn't group work?
- Why do groups **fail**?
- How will you manage your group?
- How will you deal with problems?
- What problems could happen?
- **Social/group dynamics**



GROUP PROJECT

You must COMMUNICATE



GROUP PROJECT

Work TOGETHER



"We like to bring together people from radically different fields and wait for the friction to produce heat, light and magic. Sometimes it takes a while."

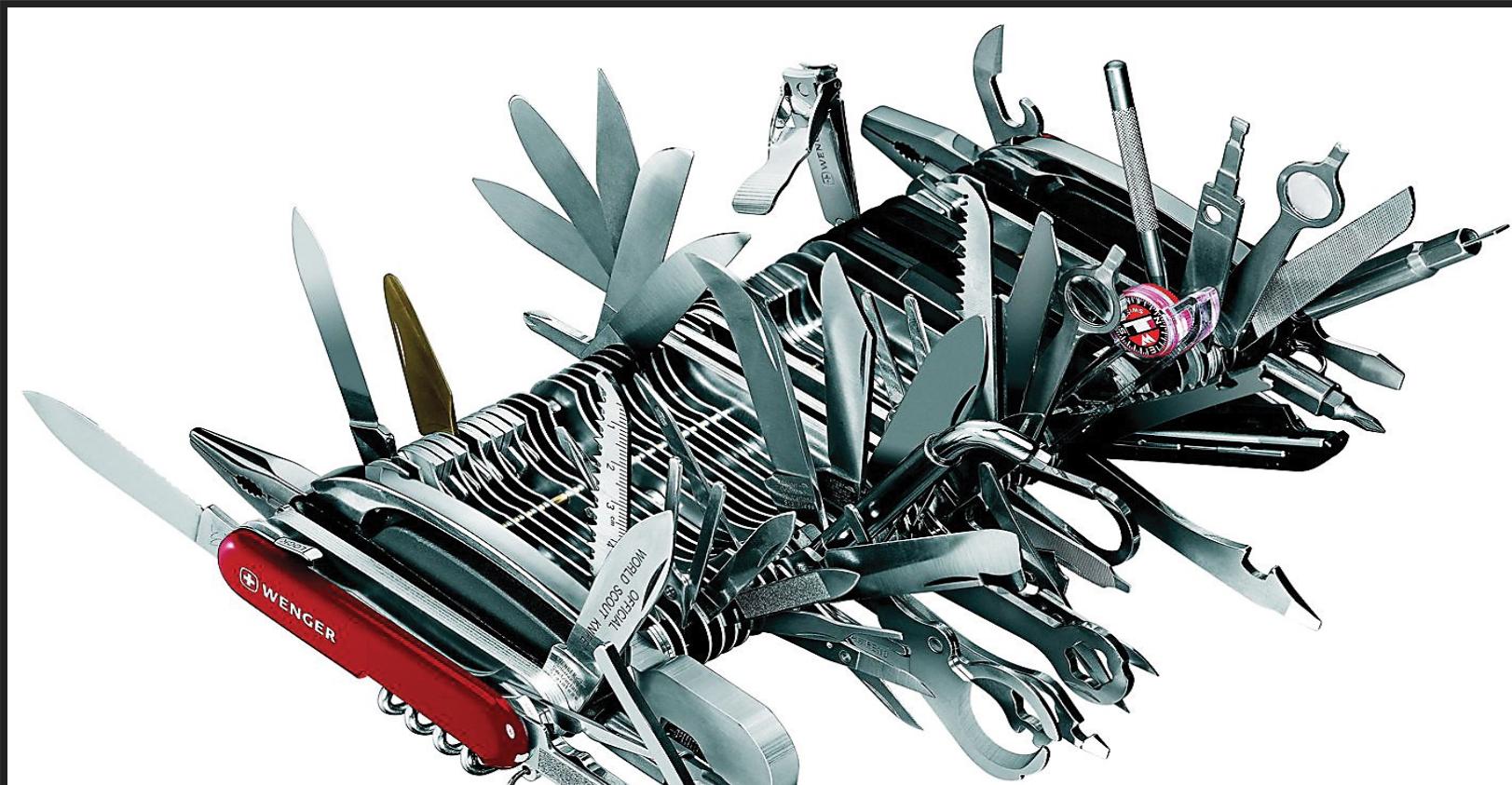
GROUP PROJECT

You can't wait for others to manage your group

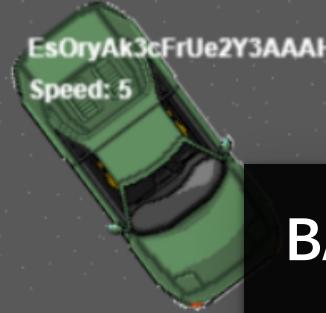
COMMON MISTAKES

- Leaving everything until the last minute
- Not **planning** ahead
- Not paying attention to **detail**
- **Quality** vs Quantity
- Over or underestimating
- Not thinking critically/experimenting/questioning
 - (what if, why not, how about, ..)

KEEP IT SIMPLE





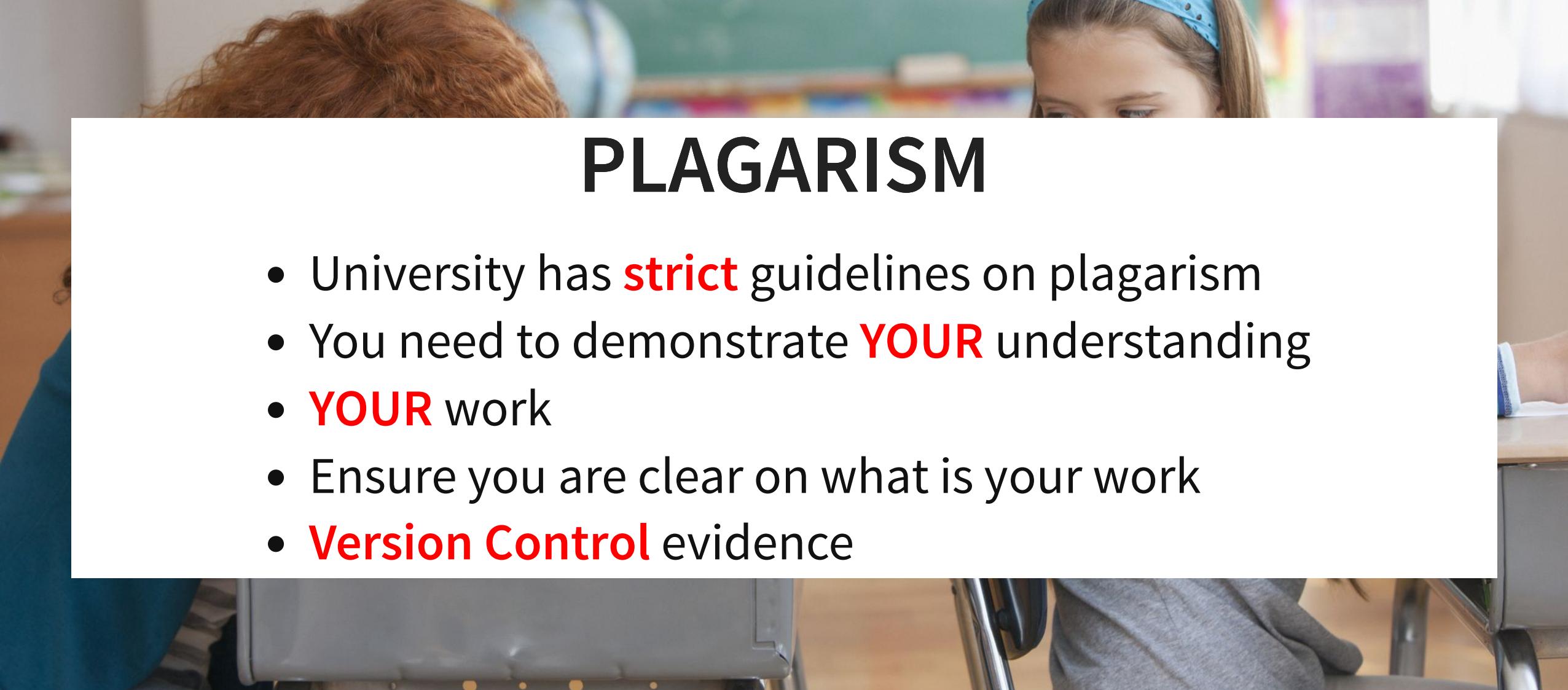


BASIC FEATURES

Get simple mechanics working first

e.g., simple objects/positions/user-input



A blurred background image showing several students in a classroom. On the left, a student with red hair is seen from behind. In the center, a girl with long brown hair wearing a blue headband looks down at her work. On the right, another student's arm and shoulder are visible. The overall atmosphere is one of a typical classroom environment.

PLAGARISM

- University has **strict** guidelines on plagiarism
- You need to demonstrate **YOUR** understanding
- **YOUR** work
- Ensure you are clear on what is your work
- **Version Control** evidence

Coursework (Setup) Example

Team Name: [Team1](#)

GitHub Project URL: www.github.com/f20wp

Members

| Username | Full Name | GitHub UserName |
|----------|---------------|-----------------|
| ab22 | Alan Smith | ab22 |
| gd3 | Gorden Davies | gd3 |
| db22 | Dave Brown | db22 |

You'll be responsible for setting up your team. Setting up the GitHub repository, managing the project

On your GitHub: add a readme explaining the project

SUMMARY

- What the coursework is (online Game)
- How it is managed
- How you'll manage your time/work
- **Hands-on Coursework (regularly work/demonstrate skills/updates/management)**

TO DO THIS ...

- Review coursework specification
- Set regular meetings with your team members
- Inform the instructor of any issues
- Challenging – so start early
- Regular updates and experiment (get into good habits)