

## Coursework Guidance List

### Web Programming

The following provides a set of guidelines and guidance for you to contemplate while you progress through your coursework. The list of items also provides a quick checklist to help you ensure you stay on track with your coursework/deliverables.

#### Type of game (i.e., must be 2D)

- ☐ Team details submitted to lecture
- ☐ Plan/objectives (milestones/dates)
- ☐ Organise this on github (readme)
- ☐ Team members (usernames, ..) all added to project
- ☐ Coding styles, (agreed and consistent)
- ☐ Meeting dates (plan/backup)
- ☐ Code validation/testing plan (automated vs user)
- ☐ Manage code changes/versions (different file types/bugs/tasks)
- ☐ Open source practices (real-world)

#### Mechanics of the game (client side)

- ☐ Game play details
- ☐ Scoring/point system
- ☐ Animation/required graphics/code
- ☐ User input/controls
- ☐ Interaction environment/collisions

#### Testing

- ☐ Usability (view/design/..)
- ☐ Working client implementation (standalone) (offline sandpit version?)
- ☐ Could the game run standalone with no other players? (e.g., early testing)
- ☐ Javascript/DOM/CSS/html (validation/sanity checks)

#### Data Management

- ☐ Separating data (temporary data, data for client and server/structured/managed) e.g., which information needs to be sent/received from the server, which is created/managed locally

#### Flow control

- ☐ Login/temp visitor
- ☐ Restarting/joining exiting game
- ☐ Managing resources/partitioning (groups/levels/regions)

#### Server-client management

- ☐ Passing data to-from the server in real time

- ☐ Suitable language/data transmission format e.g., time information, other user status information,
- ☐ Server data storage (sql/mysql/liteql/..)

#### Deployment plan

- ☐ How will it be deployment testing be done
- ☐ Is the GitHub project easy to deploy and test (outside user/community/guidance information/rules/settings/robust)?
- ☐ Deployment criteria clear (libraries, server permissions, defined)
- ☐ Is there a list of active tests, success, Q&A for the deployment of the project?

#### Security

- ☐ Validate data/user information
- ☐ Security/safety/backups

#### Optimization

- ☐ Slow connections, crashes, different browsers,
- ☐ Optimizing javascript code/graphics/design
- ☐ Compression (file/data formats, jpg vs png vs bmp, zlib, ..)

#### Library/log

- ☐ How many lines of code have been written by each team member?
- ☐ How many external files/libraries have been used? (clearly explained)
- ☐ How many external assets (images/sounds)?
- ☐ What are the game limitations?

#### Ongoing Maintenance (week by week)

- ☐ Each team member is contributing (commits, updates, testing)
- ☐ Bugs, features, releases are regularly updated
- ☐ Meetings, tasks, issues, information, are logged (record so you remember)
- ☐ Does the team work synergistically?

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