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business and the professions

Adding a peer contribution element to group assignments on Moodle with the updated peer assessment activity

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Learning At City Conference 2021 Session 5C Paper 2

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Things to note:

- Zoom links to all today's sessions are available via the Conference Calendar: <https://city-uk-lead.libcal.com/calendar/conference>
 - You will need to register for the session to receive the link (if you have not done so already)
- Please refer to the Participants Guidance - emailed to you or available on the online programme: (<https://blogs.city.ac.uk/learningatcity/learning-at-city-conference-2021>)
 - City users – please ensure you have the latest zoom update installed on your zoom client
 - External users – the guidance includes a trouble shooting section for any access issues.
- All sessions will be recorded and captioned (either live or automated captions) please let the presenters know if you do not wish to be recorded.
- The posters are available to view via the Programme and will be presented at 1pm on Wednesday with a chance for a Q&A.
- A networking room is open in-between sessions and at the end of each day (zoom link on conference calendar)
- If you have any technical issues please email: LEaDEvents@city.ac.uk
- Conference feedback – an evaluation form will be sent to all attendees after the event. Please do take the time to complete this.

Learning Outcomes

During this session we will:

- Explore the background on the peer assessment activity's original introduction and design.
- Explore the pedagogy behind the recent updates to the activity following feedback from staff and students.
- Discuss the pedagogy behind the new method used to calculate students' grades.
- Discuss information on proposed future updates.
- Discuss how to access the peer assessment activity within City's Moodle environment and within the wider Moodle community.

Peer Assessment

Two main types:

- Students assess the coursework produced by fellow students.
- Assessment of the contribution of each member of the group to the group work.

Peer assessment 'enhances the learning experience of students' by providing an opportunity to assess 'the contribution of individuals to a group project' (Johnson & Miles, 2004).

May include self-assessment, for self-reflection.

Johnston, L. & Miles, L., 2004. Assessing contributions to group assignments. *Assessment & Evaluation in Higher Education*, 29(6), pp.751-768.

Peer Assessment...

- ‘is an effective way for each student to participate actively in a team project.’ (Lee & Lim, 2012)
- ‘allows students to recognise areas of their strength and weakness as team members.’ (Lerchenfeldt et. al., 2019)
- With team-based learning ‘an instructor may not observe all the processes occurring within the student groups. Typically, instructors evaluate the quality of the final product without knowledge of the team work process.’(Lee & Lim, 2012)

Lee, H.-J., & Lim, C. (2012). Peer Evaluation in Blended Team Project-Based Learning: What Do Students Find Important? *Educational Technology & Society*, 15 (4), pp.214–224.

Lerchenfeldt, S., Mi, M. & Eng, M., (2019). The utilization of peer feedback during collaborative learning in undergraduate medical education: a systematic review. *BMC Medical Education* 19, 321.

City's Peer Assessment tool – some background

Not all students engaged with group work

Introduced into MSc programmes to:

Encourage equal and effective participation

Support group interaction and participation

Incentivise student engagement with their learning and the assessment process

Empower group members to assess each other's participation



Development of City's Peer Assessment tool

Originally not
linked to the
VLE

Administratively
time-consuming

Students could
achieve group
grade or lower

Impact varied
depending on
assessment

More fairly
assessed

Wanted reward
for good
contribution



City's Moodle Peer Assessment activity 1.0



Added to Moodle

Student's grading could affect their own grade

Moderation for each module

Self-grading could be enabled

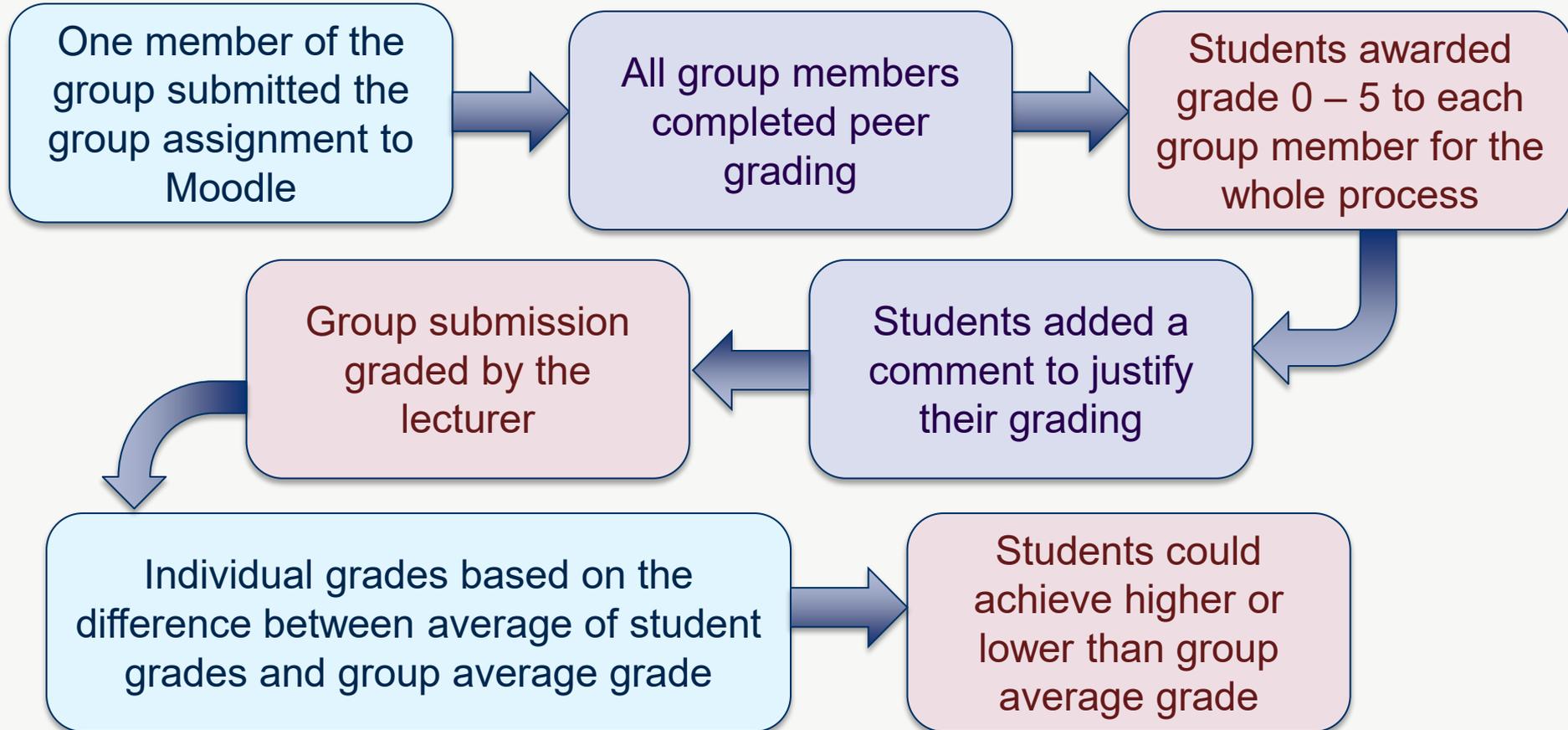
Performance and contribution of each group member assessed

Each student's grade could go up or down

Advice provided to students

Peer grades were locked by lecturer grading

Moodle Peer Assessment Activity 1.0 - Process



2017 Developments



Moodle groupings were introduced:

- Students could be in multiple groups on a module
- Peer Assessment could be applied to specific groups only

2017 Developments



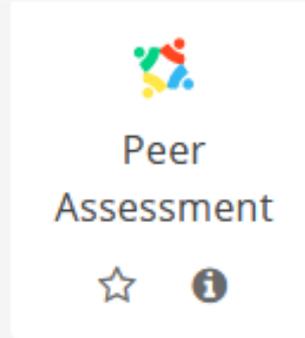
- 2nd calculation option was piloted on one programme.
- Standard deviation removed any large inconsistencies between peer grades. If standard deviation was more than 1.15, students received the group average grade.
- Smoothed out minor differences between grades: anything less than 2% difference from the average was ignored.
- Number of grades impacted by peer assessment was reduced.

New version of the peer assessment activity introduced in September 2020

- Capability for additional calculations introduced.
- Several calculation options were added to the activity.
- Rebased calculation adopted by the Business School.
- Students rate with descriptors, not numbers and under multiple headings.
- Grade override feature added to allow peer grades to be altered after lecturer grading has been completed.

Accessing the Peer assessment activity

Available as an activity on City Moodle



Available to the wider Moodle community as the Peer Work plugin:

https://moodle.org/plugins/mod_peerwork

Grade calculator options

- ❑ Grade calculator is a sub-plugin – more calculations can be added as necessary.
- ❑ The individual grades are calculated based on the lecturer grade, peer grades and the calculator setting.
- ❑ The **Peerwork** plugin has a default calculator based on **WebPA**. Details of the calculation are available from:
https://moodle.org/plugins/mod_peerwork
- ❑ City's Grade calculator has 3 grade options: Simple, Trimmed and Rebased.

City's Grade calculator: Simple



To calculate ratings for Student B:

- ❑ Step 1: Each student's rating for Student B is the simple average of the 3 criteria grades they awarded.
- ❑ Step 2: Combine all the ratings given to Student B to get an overall rating for Student B.
- ❑ Step 3: Compare student B's overall rating with the average of the overall ratings of all members of the group.

City's Grade calculator: Trimmed



To calculate ratings for Student B:

- ❑ Step 1: Each student's rating for Student B is the simple average of the 3 criteria grades they awarded.
- ❑ Step 2: Combine all the ratings given to Student B to get an overall rating for Student B. **The highest and lowest ratings are given a weighting of 50%.**
- ❑ Step 3: Compare student B's overall rating with the average of the overall ratings of all members of the group.

City's Grade calculator: Rebased



Principles underlying the rebased system

First: The system is redistributive

- ❑ The average mark is equal to the grade given by the marker
- ❑ If one student has contributed more than average, she should end up with more marks than average, ...
- ❑ ...but the student who has contributed less will be allocated a below-average mark



Principles underlying the rebased system

Second: all ratings are relative

- ❑ If student X gives the same ratings to all other group members, the computer thinks, "X believes that all others contributed equally"
- ❑ It doesn't matter whether X gives everyone a high rating or gives everyone a low rating: what counts is the difference between ratings



Principles underlying the rebased system

Third: Must cope with missing values

- ❑ It would be nice to believe that all students will complete the form ... but in practice there is a limit to chasing them up
- ❑ If a student does not send in their ratings, the system acts as though they have rated everyone equally
- ❑ If they had thought that others' contributions were unequal, they would have taken the opportunity to say so



Why "rebased"?

- ❑ The ratings awarded by student X are "rebased" in such a way that they sum to zero: this gives *relative ratings*
- ❑ The individual mark for student Y is

Group average mark +
Multiplication factor \times Y's average relative rating

- ❑ If it weren't for the multiplication factor, the differences between students' grades would be insignificant

Rebased Illustration: Ratings awarded by Xavier

	For Wolfgang	For Yvette	For Zhao	Average
Meetings	5	4	2	
Research	5	2	4	
Writeup	2	5	2	
Average	4.00	3.67	2.67	3.44
Relative rating	+0.55	+0.22	-0.77	

Rebased Illustration: Ratings received by Yvette

	From Wolfgang	From Xavier	From Zhao	Average
Relative rating	+0.88	+0.22	(0)	+0.37

Overall mark for group coursework = 69

Multiplication factor = 5

Yvette's individual mark = $69 + 5 \times 0.37 = 70.9$

Other changes

Rating with descriptors, not numbers

- ❑ Using descriptors rather than numbers makes it clearer what the thresholds are for the grading categories
- ❑ There have been cases where students asked to rate on a scale of 1 to 5 have simply assumed that 1 is best
- ❑ The descriptors map to numbers inside the program:
 - Excellent contribution (5), good contribution (4), weak contribution (2), zero contribution (0)

Other changes

Rating under multiple headings

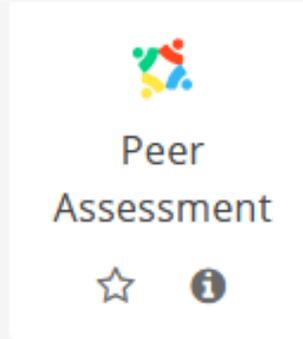
- ❑ When students are asked for a single rating, they may focus on the most recent activity (writing up and submission)
- ❑ We ask them to focus also on the research activity and on the contributions to the group's meetings
- ❑ ...this ensures that they reflect on the whole process
 - The ratings under the separate headings are combined to produce an overall rating for student Y from student X

Other changes

Grade override

- ❑ Previously, peer grades were locked when lecturer grades were added.
- ❑ Revisions were calculated manually outside of Moodle and final grades amended.
- ❑ **Grade override** allows any of the peer grades to be overridden and a comment added.
- ❑ Overridden grades are indicated by a reveal symbol which can be clicked to show the previous peer grade and previous final grade.

Creating and Grading a Peer assessment on City's Moodle



Adding a new Peer Assessment to Section 1 ?

▶ Expand all

▼ General

Peer assessment



Coursework 1

Description



Please upload your group assessment and peer grades before the deadline.

Display description on module page ?

▼ Peer assessment settings

Allow submissions from  25  June  2021  11  45   Enable

Due date  30  July  2021  17  00   Enable

Allow late submissions  No 

Lock editing  No 

Maximum number of
uploaded files  1 

Allow students to self-
grade along with peers  No 

▼ Calculator settings

Calculator

Rebased PA ▾

Penalty for non-
submission of marks



0% ▾

Rebased PA

Simple PA

Trimmed PA

Web PA

▼ Assessment criteria settings

Peer grades visibility



Hidden from students

Require justification



Hidden from students

Justification type



Peer

Justification character
limit



280

Peer

Criteria

Disabled

Hidden from students

Visible anonymous

Visible with usernames

Peer grades visibility



Visible anonymous

Display peer grades totals



No

Default Criteria 1 Description

Criteria 1 description



Rich text editor toolbar with icons for undo, redo, bold, italic, text color, background color, bulleted list, numbered list, link, unlink, insert table, and insert table of contents. Below the toolbar are icons for image, link, and H&P.

1. How well did they participate in your group meetings?
- Excellent attendance and contribution, generating ideas and participating in discussion
 - Good attendance and contribution but reluctant to take a full part
 - Occasional attendance and contribution but seldom useful
 - Did not participate / attend at all

Criteria 1 scoring type



Peerwork

Default Criteria Descriptions

2. How much of a role did they play in carrying out the research and analysis?

- Excellent contribution, including following up unexpected leads
- Good contribution but not showing creative involvement
- Partial contribution: some work done, but often incomplete
- Did not contribute at all

Criteria 3 description



A ▾



B

I



H-P

3. How fully did they participate in the writing / presentation of the final submission?

- Played a full part in the construction of the submitted piece of work
- Made some valuable contributions but left the hard work for others
- Contributed to a small extent, but the contributions needed to be edited
- Did not contribute at all

Criteria 3 scoring type



Peerwork ▾

Add 1 more criteria

▼ Common module settings

Availability



Show on module page



ID number



Group mode



No groups



Grouping



Peer assessment demo



Add group/grouping access restriction

Group submission

Coursework 1

Please upload your group assessment and peer grades before the deadline.

▼ Collapse all

▼ Assignment

Assignment

Maximum file size: 200MB, maximum number of files: 1



Download icon

Files



Test assign...

▼ Grade your peers

1. How well did they participate in your group meetings?

- Excellent attendance and contribution, generating ideas and participating in discussion
- Good attendance and contribution but reluctant to take a full part
- Occasional attendance and contribution but seldom useful
- Did not participate / attend at all

	No contribution	Poor contribution	Good contribution	Full contribution
LEaD Student5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
LEaD Student9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

2. How much of a role did they play in carrying out the research and analysis?

- Excellent contribution, including following up unexpected leads
- Good contribution but not showing creative involvement
- Partial contribution: some work done, but often incomplete
- Did not contribute at all

	No contribution	Poor contribution	Good contribution	Full contribution
LEaD Student5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
LEaD Student9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Justification type: Peer

▼ Justification

Add comments below justifying the scores you provided for each of your peers.

Note: your comments will be hidden from your peers and only visible to teaching staff.

LEaD Student5

Contributed well to all stages of the process.

234 character(s) remaining

LEaD Student9

Contributed well to all stages of the process.

234 character(s) remaining

Justification type: Criteria

▼ Grade your peers

Note: your comments will be hidden from your peers and only visible to teaching staff.

1. How well did they participate in your group meetings?

- Excellent attendance and contribution, generating ideas and participating in discussion
- Good attendance and contribution but reluctant to take a full part
- Occasional attendance and contribution but seldom useful
- Did not participate / attend at all

No **Poor** **Good** **Full**
contribution contribution contribution contribution Justification

LEaD Student5

Justification

280 character(s) remaining

LEaD Student9

Justification

280 character(s) remaining

Summary of all group submissions

Coursework 1

Please upload your group assessment and peer grades before the deadline.

Due date: Saturday, 26 June 2021, 5:10 PM

Time remaining: 21 hours 44 mins

Group	# members	# peer grades	Status	Grade
Group A	3	3	First submitted by LEaD Student4 on Friday, 25 June 2021, 7:18 PM.Last edited on Friday, 25 June 2021, 7:18 PM.	-   ▼
Group B	3	3	First submitted by LEaD Student8 on Friday, 25 June 2021, 6:49 PM.Last edited on Friday, 25 June 2021, 6:49 PM.	-   ▼
Group C	3	3	First submitted by LEaD Student2 on Friday, 25 June 2021, 6:52 PM.Last edited on Friday, 25 June 2021, 6:52 PM.	-   ▼

Export all group grades

Download all submissions

Release all grades for all groups

Clear all submissions

Peer submission and grades

Submission(s)



Test assignment.doc

1. How well did they participate in your group meetings?

- Excellent attendance and contribution, generating ideas and participating in discussion
- Good attendance and contribution but reluctant to take a full part
- Occasional attendance and contribution but seldom useful
- Did not participate / attend at all

	LEaD Student4	LEaD Student5	LEaD Student9
LEaD Student4-	5	5	
LEaD Student55	-	5	
LEaD Student95	5	-	

2. How much of a role did they play in carrying out the research and analysis?

- Excellent contribution, including following up unexpected leads
- Good contribution but not showing creative involvement
- Partial contribution: some work done, but often incomplete
- Did not contribute at all

	LEaD Student4	LEaD Student5	LEaD Student9
LEaD Student4-	5	5	
LEaD Student55	-	5	
LEaD Student95	5	-	

The grade descriptors map to numbers for the calculation and in the lecturer view.

▼ Justifications

By LEaD Student4 for

LEaD Student5 Great effort by whole team

LEaD Student9 Great effort by whole team

By LEaD Student5 for

LEaD Student4 Good work

LEaD Student9 Good work

By LEaD Student9 for

LEaD Student4 Good group work by all

LEaD Student5 Good group work by all

▼ Tutor grading

Group grade out of 100

Justification type: Peer

▼ Tutor grading

Group grade out of 100

Calculated grades

Not yet graded

Feedback to group

↵ A ▾ 🔥 ▾ B I ↶ ↷ ☰ ☷ 🔗 ⚙️ ⓘ ⚙️ 🖼️ ✨ H-P

Very good work. |

Feedback files

Maximum size for new files: 200MB

📄 📁

▶ Files

↓

You can drag and drop files here to add them.

Save changes

Cancel

Summary of all group submissions: Graded

Coursework 1

Please upload your group assessment and peer grades before the deadline.

Due date: Friday, 25 June 2021, 7:30 PM

Assessment closed for: 7 mins 12 secs

Group	# members	# peer grades	Status
Group A	3	3	Graded by Lisa Baker on Friday, 25 June 2021, 7:35 PM.
Group B	3	3	Graded by Lisa Baker on Friday, 25 June 2021, 7:35 PM.
Group C	3	3	Graded by Lisa Baker on Friday, 25 June 2021, 7:36 PM.

Export all group grades

Download all submissions

Release all grades for all groups

Grade

67 



72 



69 



Summary of grades for all students in a group

▼ Tutor grading

Group grade out of 100

Calculated grades

Name	Contribution ?	Calculated grade ?	Penalty	Final weighted grade	Revised grade ?
LEaD Stduent8	0.8000	72.80	0%	72.80	<input type="text"/>
LEaD Student1	-1.3000	70.70	0%	70.70	<input type="text"/>
LEaD Student3	0.4000	72.40	0%	72.40	<input type="text"/>
Total		215.90		215.90	

Summary of grades for all students in a group

▼ Tutor grading

Group grade out of 100

Calculated grades

Name	Contribution ?	Calculated grade ?	Penalty	Final weighted grade	Revised grade ?
LEaD Stduent8	0.8000	72.80	0%	72.80	<input type="text"/>
LEaD Student1	-1.3000	70.70	0%	70.70	<input type="text" value="72.00000"/>
LEaD Student3	0.4000	72.40	0%	72.40	<input type="text"/>
Total		215.90		215.90	72.00

Grade override feature

	LEaD Student4	LEaD Student5	LEaD Student9
LEaD Student4	-	5	5
LEaD Student5	5	-	5
LEaD Student9	5	5	-

Override peer grades given by: Select ▾

- LEaD Student4
- LEaD Student5
- LEaD Student9

Grade override feature

Grades given by LEaD Student5

▼ Criteria 1

1. How well did they participate in your group meetings?

- Excellent attendance and contribution, generating ideas and participating in discussion
- Good attendance and contribution but reluctant to take a full part
- Occasional attendance and contribution but seldom useful
- Did not participate / attend at all

Grade for

LEaD Student4

Grade

Full contribution

Overridden

Final grade

Good contribution ▾

Comments



Student advised that they had checked the wrong box for this student

Grade for

LEaD Student9

Grade

Full contribution

Overridden

Final grade

Full contribution ▾

Comments



Empty comment box

Grade override feature: Reveal symbol showing overridden peer grade and final grade before overrides

4	4	-
5	4	2

of a role did they play in carr

Overridden peer grade: 5

▼ Tutor grading

Group grade out of 100

67

Calculated grades

Name	Contribution	Calculated grade	Penalty	Final weighted grade	Revised grade
LEaD Student4	-0.4000	66.60	0%	66.60	<input type="text"/>
LEaD Student5	0.0000	67.00	0%	67.00	<input type="text"/>
LEaD Student9	0.4000	67.40	0%	67.40	<input type="text"/>
Total		201.00		201.00	

Grade before overrides: 67.00

Continued Development

- Add grouping as a separate setting.
- Allow decimals in grades.
- Refine override comments:
 - Each overridden comment to be added to override reveal and made mandatory.
- Minor refinements to the rebased calculation.



Questions?

An aerial photograph of London, England, with a semi-transparent red overlay. The London Eye is prominent in the center-left, and the River Thames flows through the city. The text is overlaid on the top left of the image.

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