




Task 1: As explained in the lecture on Merging Detached Objects, simulate a user’s interaction with an application in which the user is doing the following:

- 1) Loading **Guide** with id=2
- 2) Modifying the salary of the **Guide[id=2]** to **2500** and the name of its associated **Student[id=1]** to **Amy Jade Gill**
- 3) Persist the changes made to the **Guide[id=2]** and **Student Student[id=1]** to **hello-world** database

Implement the given user interaction using **detached objects** and **extended persistence context**.

Consider the following to be the starting state of the **student** and **guide** tables for each implementation.

student				guide			
 id	enrollment_id	name	guide_id 	 id	name	salary	staff_id
1	2014AL50456	Amy Jade Gill	2	1	Mike Lawson	1000	2000MO10789
2	2014JT50123	John Smith	2	2	Ian Lamb	2000	2000IM10901
3	2014BE50789	Bruce Lee	NULL	3	David Crow	3000	2000DO10777
4	2014RG50347	Rahul Singh	3				

Task 2: In the lecture, we used **CascadeType.MERGE** to merge the detached **Guide**, which merged not just the detached **Guide** but also the **Student** objects associated with it. Do you think the same could have been done using the **CascadeType.PERSIST** instead?

Task 3: If the line `int numOfStudents = students.size();` is removed from the **HelloWorldClient** to initialize the **students** collection proxy, what are the exceptions it would cause to throw? If the answer is **none**, please explain why?

***The source code files for the lecture on “Merging Detached Objects” are available to be downloaded with this lab exercise. You could use them to complete the given tasks successfully.