Group Project 3: Banker’s Algorithm

Date: 11:55 pm, October 27th (Sunday), 2024

Member’s name:

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In this project we used some structures which allow for efficient resource tracking and allocation management. Such as available vector which tracks the number of available units for each resource type. Max matrix represents the maximum resources each process may request.

Allocation matrix tracks resources currently allocated to each process. Need matrix to calculate the remaining resources each process requires (Need = Max - Allocation). To manage resource requests, we used validation which helps to check if requests are within need and available. Temporary allocation helps to simulate allocation and uses the Safety Algorithm to check for safety. Rollback reverts changes if the system turns unsafe after a request. About safety, we used initialization, process checking, and safe sequence.

Contribution:

|  |  |
| --- | --- |
| class BankerAlgorithm, check\_safe | Nhi |
| request\_resources, main | An |
| Readme | An |
| Report | Nhi |
| Video | An |
| Submit + Organize | Nhi |

Nhi: 100%

An: 100%