

Operation Contract and Interaction Diagram - recordResourceBorrowing()

Name: recordResourceBorrowing()

Responsibilities:

- To identify which resource is being borrowed and add it to the loan list

Pre-conditions:

- The system has confirmed a patron membership.
- A loan[] data structure has been created.
- The patron presents an item for borrowing.
- The library staff scans the ID (resourceID) of the library resource and an input is given to the borrowResourceHandler class.

Post-conditions:

- resourceID is sent through the expert Library class to a controller CatalogManager class
- CatalogManager searches through the Catalog[] data structure for the needed resource
- If CatalogManager finds the item, it returns the item's identifier to the Library class
- The Resource object with the needed attributes (resourceID, title, author, description, due date of 3 weeks) is sent to Library.
- The Resource object is passed to borrowResourceHandler and added to the loan[] data structure through the borrowingTransaction class.
- A request is sent to the display manager to show the Record object on screen.

Exceptions:

- If the given resourceID is not matched with a Resource in Catalog, an error message is displayed to the library staff.

