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| **Functional Requirement** | **Class name** | **Method Name** |
| FunctReq001  Register User | User Class | setLinkDate() |
| User Class | User() |
| Regular User Class | RegularUser() |
| Premium User Class | PremiumUser() |
| Read Controller Class | registUser() |
| Main Class | executeOption() |
| Main Class | registerNewUser() |
| FunctReq002  Register New Product | Book Class | Book() |
| Magazine Class | Magazine() |
| Bibliiographic Product Class | generateUniqueId(); |
| Bibliographic Product Class | BibliographicProduct() |
| Read Controller Class | registBiblioProduct() |
| Read Controller Class | registBiblioProduct() |
| Main Class | executeOption() |
| Main Class | registerNewProduct() |
| FunctReq 003  Update Products | Bibliographic Product Class | setProductPages |
| Bibliographic Product Class | setProductName |
| Bibliographic Product Class | setProductPrice() |
| Read Controller Class | modifyProductPages() |
| Read Controller Class | modifyProductPrice() |
| Read Controller Class | modifyProductName() |
| Main Class | executeOption() |
| Main Class | modifyProduct() |
| FunctReq 004  Delete Products | Read Controller Class | deleteProduct() |
| Main Class | executeOption() |
| Main Class | deleteProduct() |
| FunctReq 005  Generate objects for each type of user and product. | Read Controller Class | testCase() |
| Read Controller Class | ReadController() |
| Main Class | executeOption |
| Main Class | Main() |
| FunctReq006  Buy a book | Bibliographic Product Class | getProductName() |
| User Class | getUserName() |
| User Class | addProduct() |
| Regular User Class | addProduct() |
| Premium User Class | addProduct() |
| Book Class | setCopiesSold() |
| Read Controller Class | buyBook() |
| Main Class | executeOption() |
| Main Class | buyBook() |
| FunctReq007  Subscribe to Magazines | Bibliographic Product Class | getProductName() |
| User Class | addProduct() |
| Bibliographic Product Class | getProductName() |
| Regular User Class | addProduct() |
| Premium User Class | addProduct() |
| Magazine Class | setActiveSubscriptions() |
| Read Controller Class | buyMagazine() |
| Main Class | subscribeMagazine() |
| Main Class | executeOption() |
| User Class | getUserName() |
| FunctReq008  Simulate Lecture Session | Regular User Class | displayAds() |
| Bibliographic Product Class | getProductName() |
| Bibliographic Product Class | getBookPages() |
| Bibliographic Product Class | getUniqueId() |
| Read Controller Class | reproduceAd() |
| Read Controller Class | checkPremium() |
| Read Controller Class | checkProductProperty() |
| Read Controller Class | returnProductName() |
| Read Controller Class | increaseProductReadPages() |
| Read Controller Class | returnBookPages() |
| Main Class | executeOption() |
| Main Class | lectureSession() |
| FunctReq 009  Show User’s library | Bibliographic Product Class | getUniqueId() |
| Bibliographic Product Class | getPublicationDate() |
| User Class | sortProductsByPublicationDate() |
| User Class | sortProductsByPublicationDate() |
| User Class | getInventorySorted() |
| User Class | getUsername() |
| Read Controller Class | userProductsMatrix() |
| Read Controller Class | printLibrary() |
| Main Class | lectureSession() |
| Main Class | showLibrary() |
| Main Class | executeOption() |
| Bibliographic Product Class | getAmountReadPages() |
| Read Controller Class | showReadPagesOfBook() |
| Read Controller Class | showReadPagesOfMagazine() |
| FunctReq010  Show pages read by product type. | Read Controller Class | checkProductsEmpty() |
| Main class | showReadPagesproduct() |
| Main Class | executeOption() |
| Bibliographic Product Class | getAmountReadPages() |
| Magazine Class | getCategory() |
| Read Controller Class | showMostReadCategory() |
| FunctReq011  Show most read gender or category. | Read Controller Class | showMostReadGenre() |
| Read Controller Class | checkProductsEmpty() |
| Main Class | showMostReadGenreandCategory() |
| Main Class | executeOption() |
| Magazine Class | getCategory() |
| Book Class | getGenre() |
| Bibliographic Product Class | getProductName() |
| FunctReq012  Show top 5 read Products | Bibliographic Product Class | getAmountReadPages() |
| Read Controller Class | countBooks() |
| Read Controller Class | countMagazines() |
| Read Controller Class | showTop5Magazines() |
| Read Controller Class | showTop5Books() |
| Read Controller Class | checkProductsEmpty() |
| Main Class | showTopFive() |
| Main Class | executeOption() |

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| FunctReq013  Show sold books by Genre | Book Class | getBookGenre() |
| Bibliographic Product Class | getProductPrice() |
| Bibliographic Product Class | getCopiesSold() |
| Read Controller Class | countHistoricSales() |
| Read Controller Class | countFantasySales() |
| Read Controller Class | countScienceFictionSales() |
| Read Controller Class | checkProductsEmpty() |
| Main Class | showGenreSales() |
| Main Class | executeOption() |
| FunctReq 014  Show Active Subscriptions | Magazine Class | getCategory() |
| Bibliographic Product Class | getProductPrice() |
| Bibliographic Product Class | getCopiesSold() |
| Read Controller Class | countVarietySales() |
| Read Controller Class | countFantasySales() |
| Read Controller Class | countCientificSales() |
| Read Controller Class | checkProductsEmpty() |
| Main Class | showCategorySales() |
| Main Class | executeOption() |
| FunctReq 015  Unsubscribe to a Magazine | User Class | searchProduct() |
| User Class | getUsername() |
| User Class | removeMagazine() |
| Magazine Class | decreaseActiveSubscriptions() |
| Read Controller Class | unsubscribeToMagazine() |
| Read Controller Class | checkProductsEmpty() |
| Main Class | unsubMagazine() |
|  | Main Class | executeOption() |