Project Design

CMSC 495 6380

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Group 5

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**Revision History**

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| --- | --- | --- |
| **Date** | **Name** | **Description** |
| 6/13 | Summer | Created document with cover page, revision history table, and outline.  Initial pseudocode for interest accrual subsystem. |

**Event Trace Diagram**

**Class Design**

1. Authentication Subsystems
2. Transaction Subsystems
3. Interest Accrual Subsystem

Class Interest {

database.connect() //standard library database API

APY = .003

Void interest(user\_ID){  
 last\_updated = database.fetchall(user\_ID)[“last\_updated”]

day\_delta = today – last\_updated

if day\_delta > 0{

collect\_interest = APY/365 \* day\_delta

new\_interest = database.fetchall(user\_ID[“interest”] + collect\_interest

database.execute(user\_ID, interest = new\_interest)

}

return

}

**Risk and Risk Mitigation**