**CS3307 – GROUP 6 PROJECT PLAN**

**TO KEEP IN MIND**

Task list

Lead-responsible agent for each task.

Assist-responsible agent for each task

Final delivery date (to the Group) of the results of each task.

Intermediate checkpoint dates (before the delivery to the group) for each task.

Progress statement at intermediate checkpoints. (This is very useful for early risk assessment and taking appropriate measures)

Whether final delivery of a task to the group has been done or not.

**DESIGN/CODING**

1. Credit card implementation
   1. Client dependant credit limit
   2. Bills paid monthly from the chequing account
      1. Either full or minimal amount
   3. Interest accrual on unpaid portion
   4. Insufficient funds result in notification and freezing the credit card
   5. View purchases from ATM program
      1. 75% warning
2. Point-of-sale system operated by vendor
   1. Frozen cards rejected with appropriate error message
   2. Pin number for authentication, same as pwd for ATM
   3. Random number generator chooses amount (between $1-$100)
   4. Client accepts or cancels
   5. Vendor has database of amounts
   6. Shared database for purchase data also??
   7. ATM has database of purchase records
   8. Credit limit NOT enforced at point of sale

**DELIVERABLES**

1. Enhanced design of the banking system and design of the vendor system.
2. C++ code implementing [1].
3. Explanation of the correspondence between code and design.
4. Operational evidence (through execution traces) of the following scenarios:
   * Purchase made at the vendor (valid credit card). Bank notified of transaction.
   * Purchase made at the vendor (frozen credit card). Customer notified.

- Customer views current month’s purchases at ATM.

- End-of-month event trigger:

- Successful credit card payment.

- Failed payment (credit card frozen)  
**= 10%**

1. Design inspection instrument filled out with analysis and findings.  
   **= 10%**
2. “**CCCC Software Metrics Report”** for releases R1 and R2.
3. A spreadsheet depicting historical OO measures for releases R1 and R2 with

colour codings (RED and YELLOW) for danger and caution cases.

1. Quality trend across releases R1 and R2.   
   **= 10%**
2. A modified *design* of the banking and vendor systems, that includes the design pattern.
3. An explanation of the design pattern and how it works in the context of the banking and vendor systems.  
   **= 5%**

**TIMELINE**

- Start inspection now

- Code must be complete by Dec 30th

- Design pattern addition by