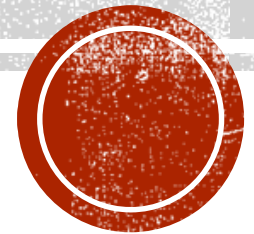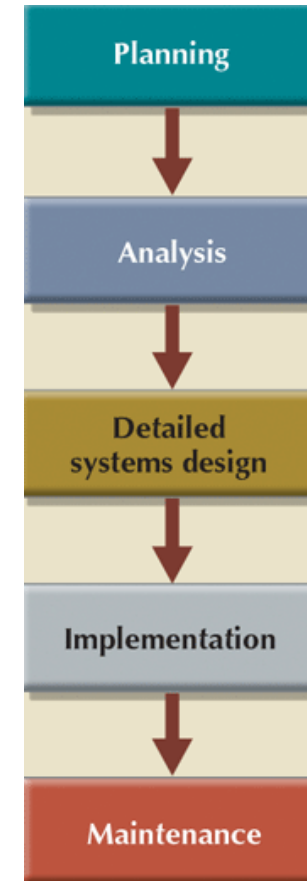# FINAL ASSIGNMENT

PROJECT PROPOSAL

George wants to start his own business by selling stuff online. So he needs a website that has the following functionalities:
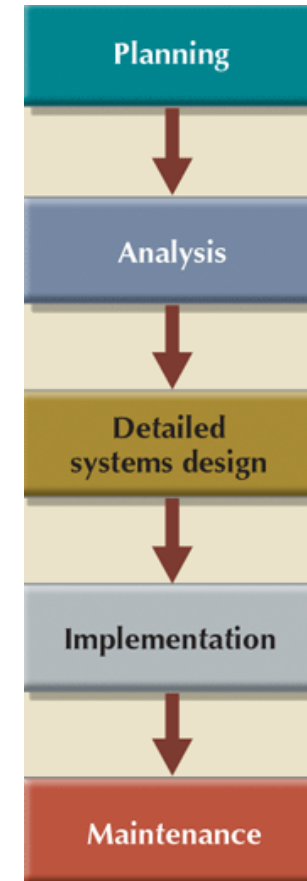
- User registration

- User account
  - Shopping cart
  - Shopping history
  - Wish list

- Stock management

- Recommender systems

- Monthly/Quarterly/Annually revenue report

Planning
↓
Analysis
↓
Detailed systems design
↓
Implementation
↓
Maintenance

PROJECT PROPOSAL

George wants to start his own business by selling stuff online. So he needs a website that has the following functionalities:

- User registration

- User account
  - Shopping cart
  - Shopping history
  - Wish list (optional)

- Stock management (optional, partial)

- ~~Recommender systems~~

- Monthly ~~Quarterly/Annually~~ revenue report

3

ENTITIES

- User/Customer
- Item
- Order/Transaction
- Shopping cart

BUSINESS RULES/LOGICS

- A customer is associated with one user account.
- A customer must have a user account to place an order.
- A customer can place many orders.
- An order can include many items.
- An order can have only one order number.
- An item is associated with one price at any one given time.
- An item in an order can be purchased in multiple quantities.
- An item must be placed into a shopping cart before it can be placed into an order.

- An order can only be delivered/dispatched to one postal address.
- A customer must have a user account to be able to use the shopping cart.
- A customer can have one shopping cart at a time.
- A customer's shopping cart can include many items.
- Each item in the shopping cart can have multiple quantities.

BUSINESS RULES/LOGICS (OPTIONAL)

- An item can have multiple quantities in stock.

- An item must be in stock before it can be placed into a shopping cart.

- An item must be in stock before it can be placed into an order.

MONTHLY REPORT (OPTIONAL)

- Monthly report should include
  - Revenue
  - Average spending per order
  - Top 3 popular items bought
  - Number of new registration

- Use database view to implement this!!
- View report from previous month.

DELIVERABLES

40%
- An ER diagram in PDF format.

- .mwb file for your ER model.
  - Export ER model from workbench as an .mwb file.

60%
- Dump file for the structure and data of your schema.

- Optional/additional features with correct implementation will be awarded as bonus points towards your final score for the semester. (up to 5 points)

- Make sure your name your schema in the following format:
  - db_<student_number>, replace <student_number> with your student number.
  - For example, db_108435999

- Due date: 2019 June 20th, 23:59.