**CLC Project Assignment – Milestone 1**

**Project Scope and Design**

Requirements:

1. Review requirements in Project Overview.
2. Project Proposal, draft Sitemap, and draft division of work across team.
   * The Team must provide a detailed write up describing what domain and products will be managed by the application.

Some examples of domains and products:

1. **Car store**. Each product will be a car with properties of year, model name, options package, color, motor size, turbo charged, price, consumer reports grade, 0-60 acceleration, MPG city, MPG highway, fuel type etc.
2. **Movie Rental**. Each product will be a movie with title, year, genre, leading actor, studio, director, length, rental price, cost of production, estimated box-office revenue etc.
3. **Dating Site**. Each “product” will be a person with properties of sex, age, nationality, favorite hobby, political description, height, weight, “wow” factor value, introvert-extrovert scale rating etc.
4. **Veterinarian Clinic**. Each product will be an appointment with properties of date, patient name, primary procedure, owner name, time, cost etc.
5. **Travel Plans**. Each product will be a trip with properties of data, trip title, destination, demarcation point, cost, duration, tour guide, strenuous rating etc.
6. **My Bucket List**. Each “product” will be an event that you plan to accomplish with properties such as cost, time required, priority ranking, estimated completion date, injury risk rating etc.
7. **Bible Heroes**. Each “product” will be a biblical character that you evaluate with properties such as name, time period, principal book of the Bible, primary partner, best-known failure, famous quote, times mentioned in the bible, likability rating, bravery rating etc.
   * The Team must provide a detailed write up describing the high level features and functionality that will be supported by the application.

Watch the video “Project Preview” to get an idea of the scope of your final project. The features that you should definitely include are: list all products, add new product, edit existing product, delete an item, search for an item. Features such as shopping carts, customer reviews, order forms are nice options, but are beyond the scope of the application that I will demonstrate during the tutorials.

* + The Team must provide an initial Sitemap illustrating all the logical pages of the application and how they will interact with each other. The team can also optional submit any user interface wireframe concepts or initial designs.

For review of building a site map, please watch the following video.

<https://www.youtube.com/watch?v=q59IJ6rRrGU>

Watch the video “Project Preview” to get an idea of the scope of your final project. It should have the following pages at a minimum.

* Login
* Register
* Product list page
* Create new product
* Edit product
  + The Team must provide a high level breakdown of how the work will be planned, managed, and divided out among the team members. It is recommended to use a formal agile project delivery methodology for this project.
  + The Team will document the risks (technical and functional) that need to be managed moving forward with the project.

Some risks for developing a project might include:

|  |  |  |  |
| --- | --- | --- | --- |
| Risk | Details | Strategy for Risk **Avoidance** | Strategy for **Mitigation** |
| My project design is too ambitious | Features such as shopping carts, customer comments, appointment scheduling, date matching, accounting and inventory systems will take too long to develop in one semester. | Study the required elements in the project needed to finish the course | Keep scope limited to the design presented in the tutorials. |
| Computer failure | Lose data, code corrupted, hardware failure, computer too slow for required applications (JBOSS) | Purchase new computer | Backup code daily to USB drive |
| Personal emergency | Sickness. Vacations. Work schedule is difficult | Don’t take this class until I can devote my full attention. | Work ahead when I have free time. Keep weekends open for homework. |
| Learning curve too steep | I will spend too much time re-learning the basics of Java programming that was taught in previous classes. | Don’t take this class until you are familiar with Java basics.  Review previous courses that are prerequisites. | Take a Java or HTML&CSS intro course on YouTube.com or Udemy.com to catch up quickly. |
| Internet service fails | Cannot submit work at 11:59 p.m. on Sunday due to a technical problem. | Upgrade to a reliable service. | Work at Starbucks. Use phone hotspot |
| Partner doesn’t do his/her share | Project milestones are missed due to late or poor quality of work from “friend”. | Ask to see your partner’s previous work or grades before agreeing to work together.  Have a frank conversation about your expectations and work habits. | Do all the work yourself to avoid incomplete results.  Request the teacher to assign a new partner or work alone. |
| Not sure how to accomplish a specific coding task | Questions to professor don’t get answered immediately. No response after 10:00 p.m. | Plan on finishing work one day before the deadline.  Get explanations from online documentation and tutorials. | Submit questions with fully documented problems: copy of source code and run-time results – errors or unexpected output. |

1. It is expected that the Team will meet with the instructor if a project cannot be identified.
2. The project must be approved by the instructor before proceeding to milestone #2.

Deliverables and Submission:

1. A Word document that provides a complete description of what domain and products will be. Describe high level features and functionality that will be supported by the application.
2. Initial Design Report (using Java Application Programming Project Report Template provided in the course materials) with the following sections completed:

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **Java III Application Programming**  **Project Status and Design Report**   |  |  |  | | --- | --- | --- | | **Topic:** | *This should be the Topic Number and Topic Name* | | | **Date:** | *This should be the date you completed the Report* | | | **Revision:** | *This should be the revision, starting at 1.0, for your Report* | | | **Team:** | 1. *This should list the members of your team* | | |  | | |  | | |  | | | **Weekly Team Status Summary:** | |  |  |  |  | | --- | --- | --- | --- | | **User Story** | **Team**  **Member** | **Hours**  **Worked** | **Hours Remaining** | |  |  |  |  | |  |  |  |  | |  |  |  |  | | | | **GIT URL:** | *The GIT BitBucket URL that I can use to clone your code and design artifacts.* | | | **Peer Review:** | *Y/N* | We acknowledge that our team has reviewed this Report and we agree to the approach we are all taking. |   **Design Documentation**  **General Technical Approach:**  *You should, in words, describe your approach and design here. You should also summarize any meeting notes, brain storming sessions, etc. that you want to retain thru the design of your project.*  **Key Technical Design Decisions:**  *Any final technical design decisions, such as framework decisions etc., should be documented here. This should list the technology/framework, its purpose in the design, and why it was chosen.*  **Known Issues:**  *Any anomalies or known issues in the code or functionality should be documented here.*  **Risks:**  *Any risks, unknowns, or general project elements that should be tracked for risk management should be documented here.*  **ER Diagram:**  *Image file of your ER database diagram. (example shown)*    **DDL Scripts:**  *This should contain a link to Bitbucket where the DDL script can be downloaded from. A DDL script is a SQL “export” file. See* [*https://www.youtube.com/watch?v=aAoYaZzWRgw*](https://www.youtube.com/watch?v=aAoYaZzWRgw) *for a tutorial. Or look here* [*https://www.youtube.com/watch?v=TDsH7KZ244o*](https://www.youtube.com/watch?v=TDsH7KZ244o) *for the 35 second version.*  **Sitemap Diagram:**  *Image file of your Sitemap diagram. Here is an example of a site map.*  mage result for â¢ Sitemap Diagram  **User Interface Diagrams:**  *You should insert any wireframe drawings or white board concepts that were developed to support your application. Here is an example.* mage result for wireframe for login page  **Class Diagrams:**  *You should insert any class diagrams here. Your class diagrams should be drawn correctly with*   1. *3 appropriate class compartments (name, properties and methods)* 2. *+ and – minus to indicate accessibility of each item.* 3. *the data types for the state/properties* 4. *the data types of method arguments and return types.*   *If you have no supporting documentation please explain the rational why you are able to leave this section as N/A.*  *Here are some examples:*    **Service API Design:**  *This section should fully document any 3rd Party Service Interface API’s being consumed or application specific Service API’s being published, how to access the service, what parameters are required by the API, and the detailed JSON data format specification that could be used by a 3rd party developer to integrate with the service and API. This requirement is not likely going to be needed until milestone #5, Java Rest Services (JSON data). There are no required 3rd party tools used in the tutorials.*  **Security Design:**  *This section should outline the design for how authentication and authorization was supported. This section should also contain all of the roles and privileges that are supported by the design.*  **Other Documentation:**  *You should insert any additional drawings, storyboards, white board pictures, project schedules, tasks lists, etc. that support your approach, design, and project. If you have no supporting documentation please explain the rational why you are able to leave this section as N/A.* |

* + Cover page with list of tasks completed.
  + Planning documentation: outlining how your project will be managed.
  + Design documentation:
    - General Technical Approach
    - Key Technical Decisions
    - Risks
    - Sitemap Diagram
    - User Interface Diagrams

1. Upload all documents to LoudCloud.

This assignment uses a rubric. Please refer to the rubric prior to beginning the assignment to become familiar with the expectations for successful completion.