

Overview

Your final project will consist of a database-driven web application supporting an event-management company, containing the database tables and features developed in class, plus other database tables and features decided by you. It is due in its completed form on the last day of class. You will need to work on it outside of class in order to produce a high quality result.

Groups

You already have been assigned to your group. Success will require all group members to work together well to plan and to implement all project features. Non-participation of group a member will be documented (use Lab dropbox comments area) and will be taken seriously. Use a file-sharing technique to collaborate on a single code-base.

Marks for Your Individual Contribution (Lab-based Participation)

You must attend each class or Zoom session in full. Also, you must upload your work done in your personal project folder (as a **Lab**) before the next class. Missing your lab deadlines will reduce your mark. **Your group project mark will be prorated by this individual mark.** For example, a group project mark of 80% with an individual participation mark of 50% will result in an individual final mark of $80\% * 50\% = 40\%$.

Minimum Project Requirements and Milestones

Your project will need to meet the minimum requirements and deadlines described below to get a passing grade (60%, or C). If you plan to exceed the minimum requirements, and you do succeed, you can achieve a higher grade. The recommendation is to make ambitious plans to start with and then try to implement as much as you possibly can.

Design – Plan, discuss, and get approval ASAP

(Mar 7)

- **Approved Topic** – your event-management company will deal with certain types of events only
- **Approved Features** – you will add several features related to your company's type of events to the starter app
- **Approved ERD** – showing all tables, relationships, primary and foreign keys, and data types. Minimum ERD is the basic 4 table e-commerce ERD + 6 more tables of your choice to support your approved features

Database, React and Rest API

(Mar 11)

- **Database** – database create script according to ERD with some sample records in tables as appropriate
- **App** – front-end React App project with Home page showing actual data, Register, Login, Logout, and Profile pages
- **Rest API Project** – back-end Rest API Project supporting your database and managing authorization

Minimum Features

Your project must have at least the following pages / features:

- Those features developed in class must be fully functional (and any added in coming days)
- The same navbar must be present on all pages and must show only appropriate links depending on the user's role
- Public Home Page – showing a searchable listing of events selling tickets. Events must have images
- Customer Home Page – showing information for the logged-in customer, including a Profile page
- Admin Dashboard Page – allowing only the administrator to see useful statistics, and perform selected functions
- Other Home Pages –At least 2 extra roles must be implemented with personalized home page (e.g. Support, Financial, Maintenance, Cleaning, Marketing, etc.)
- All pages must use a customized and standardized theme (based on **React Bootstrap** with at least 6 additional Components not covered in class), and must use proper URL routing
- Extra Pages to support the 6 more **significant** features (i.e. complex enough to require an extra table)

Ideas for extra features and functionality

To increase your mark, you will have to plan for and successfully implement more than the minimum as described above. As a rule, approximately 4 extra features will be needed to be considered for each increased grade level. You may look at any event booking or management website or app for ideas. Remember that features that involve additional tables are always worth more. For example, some interesting ideas might be the following:

- Customer Analytics – tracking customer actions in order to: follow up on unfinished sales, know customer favorites, send promotional emails with useable links to your app, show customer personalized promotions, etc.
- Adding more images – thumbnails on index view and full-size on details view (and replace tables with grids)
- Keeping track of most popular events – most attended or most searched, perhaps
- Having sales or promotions, using a discount code of some sort which reduces the price
- Showing clickable ads to the user – randomly, or according to type of item ordered
- Event Manager Home Page – allowing logged-in event personnel to have their own appropriate functionality
- Marketing Home Page – allowing a logged-in event marketing personnel to manage promotions, target customers

Marking Scheme

Your project will be marked as described below. Essentially, if you do only the minimum as described above, and nothing is missing, and it works properly, and is well-organized, your project will pass with a grade of C (60%). If you successfully implement more than the minimum in any or all of the categories, your mark will increase. And if you do not meet the minimum requirements, your mark will decrease.

Grade			
Category	C	B or A	D or F
Attendance and Milestones	Minimum requirements as described above	All classes attended and working on project throughout class time. All milestones met successfully (on time). Project finished with enough time for thorough testing and improvements.	Missing, late, or incorrectly implemented features or not functioning properly
Design		All preliminary design elements submitted in good time, approved, and implemented as planned. Lots of time left to work on website functionality.	
Pages		More complex or interesting pages implemented, resulting in more capabilities of the website (e.g. additional functionality, etc.)	
Database		More tables implemented, resulting in more complex capabilities of the website (e.g. additional content types, additional functionality, etc.). ERD not changed after initial design.	
Overall Effect	Clear presentation and correct operation, with good organization, page layout, etc. Different from other websites in class.	Well thought-out website design and functionality, with attractive layouts and color choices, and well-organized website structure. Showing originality, attention to detail, and quite different from other websites in class.	Unfinished, unclear, buggy, disorganized, messy website design, etc. Too similar to other websites in class.