Pharmaceutical Oncology Project Database – App Dev. 1 PROJECT

What is a project proposal?

Project proposals are documents that define your project, including things such as start and end dates, objectives, and goals. Project proposals tell your clients (teacher, investor, employer) why your project ideas should be approved and executed. An effective and well-written project proposal helps you communicate your project's value to your clients. Reading about your project ideas in a well-written document should convince your clients to support them.

Section 1: Executive summary

(Write an introductory section, called the executive summary, to summarize your project. Just like the introduction of an essay, this section should aim to catch your clients' attention and encourage them to read on. Your executive summary should include details about:

- The problem your project solves . this project organizes information on mice dosing, mice groups, group information and mice information, calculates mice volume/weight and tumor volume.
- How your project solves the problem helps organize the pharmacologists' information and calculates the volumes required to calculate how much dosing a certain mouse needs
- Your project's intended impact help make the pharmacologists' lives easier and keep all their data organized to help continue their research in the pursuit of cancer research

The length of your executive summary will depend on your project's complexity. One paragraph will be sufficient for many projects, but you may need a longer executive summary if your project is more complex. Make your executive summary concise to keep it engaging and convincing.)

Cancer, the one true enemy to our human civilization. As humanity has progressed, we've dedicated billions of dollars into funding research to cure this accursed threat. And now, with the help of our little rodent friends, we can speed up the testing. The issue comes down to when we need to store data for said mice. As we all

love the idea of doping a lot of mice at once, one problem comes to mind: “There are just too many mice!” Well, this project organizes information on mice dosing, mice groups, group information, mice information, and which pharmacologist is responsible for which mouse. This software will also feature tools to calculate mice volume/weight and tumor volume. Using this priceless piece of miracle software, we can help organize the pharmacologists’ information and calculate the volumes required for how much dosing a certain mouse needs. In turn, the pharmacologists can finally rest easy knowing that their research information is gathered into one, concise place.

Section 2: Project background

(Write a section that provides a background to the project and the problem it seeks to address. This section should include:

- A history of the problem as it relates to your client's business the pharmacologists are working in oncology and are attempting to find a cure for cancer, so to help keep their stuff organized and to help calculate the required information to access the necessary data to conduct their research
- A concise summary of your project's requirements they need a database to organize the mice groups, the individual mice IDs, their weights, heights, and lengths, their dosing amounts, which doses to give them, their tumor volumes
- Some details about your project we will implement charts of data as well as user-friendly calculates that automatically save the calculations into the specific mouse's data as necessary

You will write more about the details of your project in the following section, so the details you provide here should be minimal. You might focus on how and why you came to think of the project, for example. This section should be relatively brief at one to three paragraphs in most cases)

As we are here to assist our cancer research comrades, we are building an outstanding application that implements a database to store all required information about the mice. The pharmacologists are working in oncology and are attempting to find a cure for cancer, so to help keep their data organized and to help calculate the required information to access the necessary data to conduct their research.

To accomplish such a grandiose mission, our tumor testing teammates need a database to organize the mice groups, the individual mice IDs, their weights, heights, and lengths, their dosing amounts, which doses to give them, and their tumor volumes. We will implement charts of data as well as user-friendly calculates that automatically save the calculations into the specific mouse's data as necessary.

Section 3. Solutions and approach

(Write a section that outlines your project in greater detail. This section should explain your solution to the problem and how you will execute it. It should include:

- Your goals and vision for the project our goal is to help create a user-friendly software for these pharmacologists to use to organize their research data on top of also giving them a tool to calculate certain measurements (such as the amount of dosing for each mouse)
- What your project will deliver our project will deliver a user-friendly GUI and well-structured database to group all the necessary information into where they need to go. We plan to implement a section in the software that will allow the user to select a group, select a mouse from that group, then implement the necessary information

More details about the solutions and about your approach for implementing the solution. This section may also include details of any risks you anticipate and how you might address them. This section will usually be the largest part of your project proposal.)

Our goal for this software is to help create a user-friendly software for these animal-tech pharmacologists to use to organize their research data. On top of that, our goal is to provide a helpful tool to calculate all their required measurements that can be immediately stored into the data of a specific mouse. To create this fantastic software, we will need a couple of features to ensure that it meets all the pharmacologists' needs for their work.

We will deliver the following to give the pharmacologists an organized and unique software to meet all their needs. Firstly, we will obviously need to provide a "create mouse" button that can automatically ID the mouse. The pharmacologist can then organize it into their appropriate cage/group and input the appropriate dimensions and weight of the mouse.

Following creating the mouse, they can use a calculator feature to calculate the amount of dosing a certain mouse needs depending on its volume and which dose it is taking.

To differentiate between whether a mouse is actively being dosed/experimented on, there will be a section for "Active Studies." With "Active Studies" comes "Previous Studies," which will hold the information of previous mice that were tested so the pharmacologists can extract certain information from past studies.

On top of having "Active Studies", the software can have a section of mice that are awaiting approval to be tested on, so "Pending Studies."

To dose the mice, we obviously need an employee list of all the amazing pharmacologists who are putting in their best effort to find a way to beat cancer! This comes in handy for the calendar feature we'd like to apply and the employee assignment button for the mice.

When an employee opens the software, they will login under their specific credentials to access their employee profile to gather all their active studies and any private notes they may have.

To help keep the pharmacologists on track, we will implement a calendar feature that will label which employees will be on dosing duty from what time to what time.

The employee who is accessing the software will also have a feature to assign themselves to a group or to certain mice that they are dosing, which will be displayed in the mice information as well as on the calendar.

We will also include a feature that allows the pharmacologist to take notes for the specific study that they can store in a specific mouse's information. They will also be able to take personal notes that will be stored in their employee account.

Lastly, to help the employee who is accessing the software at the moment find the studies with specific criteria, we will implement radio buttons to search for certain criteria, depending on which buttons are selected.

(numbered it so we know how many features we implemented, won't be there for pretty word doc)

1. Firstly, we will obviously need to provide a "create mouse" button that can automatically ID the mouse. The pharmacologist can then organize it into their appropriate cage/group and input the appropriate dimensions and weight of the mouse.
2. Following creating the mouse, they can use a calculator feature to calculate the amount of dosing a certain mouse needs depending on its volume and which dose it is taking.
3. To differentiate between whether a mouse is actively being dosed/experimented on, there will be a section for "Active Studies." With "Active Studies" comes "Previous Studies," which will hold the information of previous mice that were tested so the pharmacologists can extract certain information from past studies.
4. On top of having "Active Studies", the software can have a section of mice that are awaiting approval to be tested on, so "Pending Studies."
5. To dose the mice, we obviously need an employee list of all the amazing pharmacologists who are putting in their best effort to find a way to beat cancer! This comes in handy for the calendar feature we'd like to apply and the employee assignment button for the mice.

6. When an employee opens the software, they will login under their specific credentials to access their employee profile to gather all their active studies and any private notes they may have.
7. To help keep the pharmacologists on track, we will implement a calendar feature that will label which employees will be on dosing duty from what time to what time.
8. The employee who is accessing the software will also have a feature to assign themselves to a group or to certain mice that they are dosing, which will be displayed in the mice information as well as on the calendar.
9. We will also include a feature that allows the pharmacologist to take notes for the specific study that they can store in a specific mouse's information. They will also be able to take personal notes that will be stored in their employee account.
10. Lastly, to help the employee who is accessing the software at the moment find the studies with specific criteria, we will implement radio buttons to search for certain criteria, depending on which buttons are selected.

Section 4. Who will take ownership of the project?

(In this section you will explain who will be benefitted by your developed project application (solution).
How your developed project application will help application users in their daily routine life / work / job related operations.
An alternative name of this section may be "**Who Is This Application For? Your mom**")

As mentioned prior, the main user of our application will be pharmacologists who specialize in oncology and who use mice to perform their studies. This will help them stay organized with their research, their notes, their mice, and their dosings.

Section 5. Additional documents

(Gather any relevant documents for this section of your project proposal. These documents might include:

- Any brochures or promotional materials for the project
- Relevant studies or reports
- A glossary of terms used in the project proposal)

This project proposal was inspired by Amanda's brother, as he is currently a pharmacologist working in oncology. Oncology is the study and treatment of tumors. His team works on mice by injecting them with tumors and then testing different types of medicine on them to see how it affects them.

Their team uses an application called StudyLog. Most of the ideas for our software were inspired by this application. A demonstration of the application can be found using the following youtube link: youtube.com/watch?v=2i4vOs1SbDo.

To make the software as accurate and useful as possible, we will ask Amanda's brother for specifics on certain features of the application and what will be necessary to make this software useful for pharmacologists that are handling mice for oncology.

Section 6. Team Members

(Include team members' (StudentID, Name, Section) information in this section.)

Amanda De Rosa (2070441) – (420-331-VA sect.00002)
James Kawashima (2148113) – (420-331-VA sect.00001)

You may select an application to develop as your final team project from any of (but not limited to) the following domains (you can bring your own ideas for the team project):

1. Educational applications with Database
2. University / College Management System with Database — HEC : Higher Education Compiler
3. Students' Information System with Database
4. Students' Enrollment and Billing System with Database — SEB - Student Enrollment and Billing
5. Exam / Test / Quiz Application with Database
6. Bank Accounting System with Database — BASS : Bank Accounting System Software
7. Employees' Information and Payroll System — CPRS : Company Pay Roll System
8. Contacts Information Management System with Database
9. Personal Health Monitoring with Database
10. Inventory Management System with Database
11. Hospital Management Application with Database
12. Point of Sale for small business with Database
13. Fast food / Coffee Shop System with Database
14. Patient Record Management Application with Database
15. Stock Market Investment Monitoring with Database
16. Restaurant Reservation and Billing System with Database
17. Hotel Reservation and Billing System with Database
18. Gym Management System with Database
19. Parking Garage automation and Billing System with Database
20. Real Estate Management System with Database
21. Game Application
22. Web-based application

youtube.com/watch?v=2i4vOs1SbDo