- 1. As a club leader, I want to be able to view my budget for the semester so I can keep a close track of my total. (1 day P1)
 - a. This value should simply be a database entry set by the administrator and locked once done. Neither the admin nor the club member would have access to changing this value once the budget for the year was set. Testing will include tests such as attempting to change the budget once set and attempting to change the budget from a club members point of view, which is an unauthorized action and is never allowed.
- 2. As a club leader, I want to be able to view all transactions and whether they have been processed or not so I can track where my club is in it's spending. (1 day P2)
 - a. The transactions will be held in another table in the database that links to the club it is submitted to. There will also be values that will say whether or not the transaction has been processed for the club leader to view. The table with the transactions will be retrieved by the C# code and displayed on the desktop app. The testing will be include adding new transactions and displaying them. The database tests will almost assuredly be MySQL only, and the displaying of both will be handled in C#.
- As a club leader, I want to be able to add funds to the fundraised budget that we have raised ourselves so I know how much money can go towards paying off my clubs debt. (1 day - P4)
 - a. This should be a textbox that the club user can essentially 'add funds' to their budget if no debt is present. If debt is present from previous years then the amount entered is subtracted from the debt. This debt will simply exist as a row in the database with the amount of funds raised subtracted from it until it reaches zero. Once debt is at zero the funds raised will be added to the budget. Testing can be accomplished by forcing withdraws which should be impossible for a regular user and by attempting to get negative budget which would simply add the funds to the total budget for the semester.
- 4. As a club leader, I want to be able to submit my club budget proposal for an easy submission process. (1 day P2)
 - a. The club budget proposal will reside in the form of an excel sheet, limiting the user to under 10 different categories for expenses within their budget. This excel sheet will be exportable to the administrator and will be stored in the database. Once done the administrator will be able to check which clubs have submitted their proposals and which have not. Testing will be done in the form of manually checking data integrity with the exported excel document and some automated testing with size limitations both exceeding and attempts at changing/submitting non existing data.

- 5. As a club leader, I want to be able to export my clubs current or past budget for easy viewing in print. (1 day P4)
 - a. This will be a simple command that dumps the table that belongs to the club into C#. it will then be formatted to fit neatly and nicely into an XML file and saved to a specified location on the source computer.
- 6. As an administrator, I want to be able to set a clubs budget to an amount specified to make sure a clubs budget is ready for the year. (1 day P1)
 - a. For this PBI, the administrator will need access to the clubs initial fund amount to be set at the beginning of the semester. A textbox with access to the database will suffice for setting the initial amount. With a lock on this amount once past a certain date or a tix box is checked; this will help to avoid tampering or accidental changes. Testing will be done by setting innapropriate budgets, such as negative budgets which should be categorized as debt, etc. Other forms of testing will be repeated attempts to change or tamper the budget from both a admin and club member side once the budget is locked for the semester.
- 7. As an administrator, I want to view any clubs history of budget to better keep track of spending for previous years. (2 day P2)
 - a. This will be handled by another table that links to a list of clubs that have ever existed. This list will link to a table of past budget year. This table can be accessed by only the admin through the C# code.
- 8. As an administrator, I want an easy way to keep track of each club's current budget, amount of debt, and list of purchases so I can better keep track of their budget. (2 day P1)
 - a. For this PBI, a database containing clubs and their budgets will suffice. The database will be in MySQL and be based off of a database that was completed in last semester's Database Management course. It will be edited to suit the needs of this project. It will likely contain tables for users, clubs, passwords and an overall budget.
 - This can be tested through some automated adding through C# code to test the integrity of the database. There will also be tests to some of the other portions of the database, but those will be better defined in the other PBl's.
- As an administrator, I want an easy way to subtract purchases from the club's budget and add returns back into the club's budget so each club has an updated budget to view.
 (1 day - P2)
 - a. For this PBI, the administrator will have a form that they can enter amounts to subtract or add to a clubs budget and it will update in the main database. There will be tables in the main database to hold the total budget amount for each club and the admin will be able to edit those tables for returns or purchases.

This can be tested through SQL statements against the clubs budgets. We will test the boundaries of the budgets by subtracting more than what is in the budget, and doing other edge testing.

- 10. As an administrator, I want to be able to view the overall club funds budget so I can track the overall budget as a whole and the percentage that each club has been allocated. (1 day - P1)
 - a. This can be handled through another table in the MySQL database. This one can contain a single entry for the overall budget and another for each of the clubs and what percent of the budget that each uses. These can either be updated through MySQL code or via the C# code that is connected to the database. For testing, determining whether a club's budget will exceed the maximum allotted for the term as well as trying to add a budget that will exceed the maximum amount or just push over the limit. These test will need to be hand coded in C# using a testing library known as nUnit.
- 11. As an administrator, I want to be able to view each club's budget proposal history so it is easy to compare previous year's budgets for each club. (1 day P3)
 - a. This will be another table in the database that contains a BLOB object for the proposal. It will also have entries for easy access, like the total amount requested, years and contact information. All of these will be required. Testing will involve adding something without one of the required fields, adding and retrieving the actual request forms, and trying to modify any already added data. This will mostly be MySQL testing.
- 12. As an administrator, I want to be able to export any clubs budget for current or past year's to have an easy to read format in print. (2 day P4)
 - a. This will be a simple command that dumps the table into C#. it will then be formatted to fit neatly and nicely into an XML file and saved to a specified location on the source drive.
 - The Testing for this stage will use different formats for saving the file, different table entries, missing entries and possibly corrupt entries to try and break the formatter for the XML files.
- 13. As an administrator, I want a way to automatically calculate purchases made online for easier record keeping. (large P5)
 - a. This will need to be handled by multiple separate programs. One to parse a total purchase price from a pdf or a picture, then to automatically add or subtract the purchase or return to the budget.
- 14. As a user, I want a way to access my account as either a club leader or administrator to be able to utilize this program. (2 day P1)
 - a. This will be a combination of C# code and a table or two in the database that utilize encoding for safe password storage. The second table or part of the table

will contain usernames or emails for login and what type of user they are, either an admin or a club owner. The types can be stored in an enum table that can be updated with different account types. These account types will be restricted based to what each can access through C# code.

Testing for this PBI will include trying to create/login with an account that has an invalid password/username and trying to access admin only functionality.

- 15. As a club leader, I want to be able to add receipts in the form of PDFs so they can be processed by the administrator. (1 day P2)
 - a. This can be done by using a BLOB in the database to contain the PDF or picture of the receipt. The entry itself will need to have all the specified data that will make the submission process easier.

Testing can be handled in both C# and MySQL by trying to add objects other than a picture or PDF. there will also be attempts at saving/reading these through various means to try to corrupt the file.