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# SPRINT FOUR

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**CS2450-002, Team 2**

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Jaden Albrecht-*Team Manager*

Tyler Deschamps-*Chart and Milestone document builder*

Jordan Van Patten-*V&V and Tester*

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# Management

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## Procedures

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### *Verification & Validation*

summary:

### *Change Control Board*

Summary:

### *SPR-4 Change Order Forms*

Summary: These are all of the change order forms that have been filled out for this sprint

The image displays two 'Change Order Request Form' templates side-by-side. Both forms have a red border and are titled 'Change Order Request Form' at the top center. Each form contains the following fields:

- ID:** A small box with a red border containing the number 4 for the left form and 6 for the right form.
- Detailed Description:** A large box with a red border containing the following text:
  - Left form: 'The ability to search the employee database using any employee attribute, not just ID and last name. It would make searching the database a lot more flexible. Change our search database function from just taking ID or last name to be able to take any employee object attribute/property as a parameter and based on that parameter, the function would search the database for that thing. We would then change the radio buttons to a combo box that would show all the potential parameters for the user to choose from.'
  - Right form: 'Depending on the user's permission level, a different visual theme will be shown throughout the GUI. We would implement two distinct themes for each page based on user permission. Research on sister themes still needs to be done and the specific themes still need to be decided.'
- Approved/Denied:** A yellow box with a red border containing the word 'Pending'.
- ManHrs:** A box with a red border containing the text 'ManHrs'.
- 2hrs:** A box with a red border containing the text '2hrs'.
- Date Submitted:** A box with a red border containing the date '20/03/2022'.

## Plans

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### *SPR-4 Risk Management Plan*

Summary: This is the risk management plan that focuses on potential risks on sprint four. It is oriented to risks that we face when writing the code and the finished product.

| ID | Category                 | Description   | Consequence  | Probability | Impact | Risk Minimalization plan   | Contingency plan  |
|----|--------------------------|---|--|-------------|--------|--|---|
| 1  | Login Page               | Login page fails to load, or fails to do what it is supposed to                             | No one would be able to access the site  | Low         | High   | Following the V&V process, along with constant and thorough testing  | Shareholders will have contact info of team, fixing login-page will be a high-priority                    |
| 2  | Merge database           | Program fails to read in a previous data base and add it to current one                     | Customer would be forced to add each employee from the previous data base to the current one by hand | Medium      | Medium | Constant communication with shareholder to understand how all previous databases have their information stored | Would have to update the program to be able to read in how the previous database was stored               |
| 3  | Security breach          | Personal data is stolen and/or sensitive data field being altered                           | Private information being leaked, database no longer having accurate information                     | Medium      | High   | Constant testing and V&V, possible use of data encryption software   | Will likely have to use more powerful third party software to create stronger layers of protection        |
| 4  | adding/editing employees | Program fails to update the information of a new employee or add in a new employee          | Employee may be getting paid the wrong amount/not getting paid at all                                | Low         | High   | Constant testing and following the V&V process.  | Shareholders will have contact info of the team, team will quickly diagnose the issue and fix the program |
| 5  | Privileges               | Employees are allowed access to data fields that their privileges shouldn't allow access to | Employees can edit important information that they shouldn't be allowed to                           | low         | High   | Constant testing and following the V&V process.  | Shareholders will have contact info of the team, team will quickly diagnose the issue and fix the program |

### *Maintenance Plan*

Summary: The maintenance for sprint four will be focused on maintaining code through proper testing and V&V as well as reporting bugs and fixing them quickly based on priority.

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## Deployment

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### Deployment Plan

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# Testing

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## Testing

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### *Test Plan*

summary:

### *Test Report*

summary:

### *Usability Test*

summary: Cody Strange ran the usability test because he has the least amount of knowledge in dealing with the code.

- Test#1: I was unable to get the program running, I downloaded the zip file and tried to run every file that was there, at best they did nothing I could see. At worst they through errors. I was unable to get it running and will need to discuss this with the team to find out why it is not working.
- Test#2: I was able to get the program to work after adjusting one of the paths that are called in the code, I was brought to the login page and typed in the proper id and password and that worked fine. It instantly brought me to the Add Employee page, and only had a “Add Employee” button, “Cancel” button, and “Help” button. The help button through a message that said it was a work in progress. But when I tried to add an employee it would just say that I was missing fields even though I wasn’t. Once I hit the cancel button something very odd happened. Most of the fields disappeared and the ones that remained could not be edited. The page was still called “Add Employee”, the “cancel” button does not do anything. And I tried to exit out of the program but the “X” in the top right corner doesn’t work.
- Test#3: Cannot find out which fields that I am typing in are invalid, seems to require me to fill out an hourly wage, salary, and commission. Even though it asks me to decide which one to use. Also has me fill out the end date even though the employee is just starting.

## Bug Tracking

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### *Bug Tracking Plan*

summary: We are using backlog to keep track of bugs that appear in the program. When a new bug is discovered, the programmer/tester creates an 'issue' on backlog where they give the bug a brief name and detailed description of what the bug causes. It is then assigned to someone to fix and a due date to fix by and labels it so that it appears in the 'Open' section of the board. The assignee then moves it to the 'In Progress' section while he is fixing it. Once he fixes the bug it is then moved to the 'Resolved' section and the person who fixed it leaves a comment giving a brief description on how they fixed it.

### *Bug Report*

summary: The bug report has been slightly adjusted from last sprint, with the "Severity" category being renamed to "Priority."

### *Lincoln Index*

summary:

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## Charts/Forms

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### SPR-4 Work Breakdown Structure

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#### *Chart*

Summary:

### SPR-4 Pert Chart

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#### *Chart*

Summary:

## SPR-4 Gantt Chart

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*Chart*

Summary:

## SPR-3 Burndown Chart

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*Chart*

Summary:

## Research

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*Sources*

- Beginning Software Engineering(chapter 3)
- CS2450 Lecture #6(2/2/2022)

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## Meeting Logs

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Meeting Log#9

Meeting Log#10

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Meeting Log#11

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Meeting Log#12

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Meeting Log#13

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