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Business Tracker is an application in mind for those small to medium sized businesses that need to keep track of multiple projects going on within the company. Technically speaking, our application will provide a front and back end development that will enable a company to have each employee be a user in the system and the projects that they have been assigned will show up on their account. We are solving the issue of communication between project members and consolidating all projects to one framework for the business at hand. A database will keep track of all user information (including user name and login) and will store all projects to the database. Projects will be viewable within their scope (public or private), and each user will be able to update tasks within their project so that all project members will be able to see the changes made. We manage the inflow of data with the backend database and the front end becomes a simplistic user interface for the employees to use to their advantage.

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Our Business Tracker is a development that will make it easy for small and moderately sized businesses to keep track of all the projects they have going and to whom the projects are assigned to. This development will let employees be added to projects, let them be assigned different roles within a project, it will allow them to make their own notes and tasks within a project that all other employees can see. We wanted businesses to have a way to keep organized and to be able to have somewhere in which all their projects are being constantly completed, updated, and changed. Each employee will have a login to get into the site and will have their own powers over projects they are assigned to. The Business Tracker will also be a great way to keep communication up to date between project members using notes, tasks, and a chat area for each individual project.

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Having all employees logging into their own accounts means that possible hacking could occur. We don’t want one employee messing with the projects of another employee or having an outsider being able to see what projects are being created within a business. The best way to combat this issue is by employing encryption.

Another obstacle that we need to avoid is having employees being able to access all projects. An employee should only be able to access the projects they are assigned to because this could cause confusion between those who are developing the project. To elaborate, an employee should not have access to projects they are not in because they do not know how the project is being organized, what resources are being used for it, nor do they need to fill their time with looking at other projects when they have their own assigned projects to be working on. To solve this obstacle, we will ensure that only changes and updates are allowed to be made by an employee that is within a group project. When a user logs in, they will only be able to see the projects that they are involved in, unless the projects are made public to everyone. This is also another way to solve the viewability of a project. A project can be created as public or private; public being viewable to everyone and private being viewable only to those assigned to the project.

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This is not the first tracker to ever be created, but what we are trying to do is hone in on a specific audience and meet their needs instead of having a basic development that can be utilized for all people but in a less relatable way. This should ensure that we won’t have the industry risk of having no companies wanting to use our application or a decline in the number of companies using our application. We have looked at other competitors like GitHub and other trackers to see what companies like of the applications already out there and to see what the companies would want to be added, so that the application is being as useful as possible, meaning that all parts of the development would be used because all were necessary for a company.

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Our web development will be open to multiple web browsers. Chrome, Firefox, Internet Explorer (IE), and Safari would all be viable options. Thus, if the computer has internet, a user will be able to access the site. This decreases the restriction of where a user can work. They can work from their phone, computer, or tablet.

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For our application, we will be using a MySQL server. To develop the front and backend of the application, we will use Python with Flask that will enable us to connect to a database to store all the project and employee information. Some enhancement options would include us using Bootstrap to make the application more visually appealing. Possibly we would utilize a proper web server like Apache or nginx in addition to the MySQL server.

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A big question to answer when developing software is how the users will access it. For our application, the question is how the employees will be able to log into their account and access projects and communicate with other employees from the company. Deployment for our application will be done through web browsers like stated earlier (IE, Chrome, Firefox, Safari). This will enable computer and mobile device access.

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The employees don’t need to see all the programming the front and back end of the application. The users will just need a document to tell them all the functions (ie. all the different things they can do with the application like communicate with other employees in their project or adding tasks to projects). Developers might be more interested in the actual code itself and with that we can provide functionalities of the program for them. Our application is not open source, but whatever is updated and changed will be documented for developers and employees if it fits within the scope of what they can see.

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A long, confusing user guide is not what our development will rely on. We want the users to feel the simplicity of our application and not feel overwhelmed when having to log into it to keep up to date with all their projects. Thus, the user guide will give the simple functionalities of what the application can do; our user interface (UI) will help with the short user guide. The UI should be self-explanatory, and an employee should only have to refer to the user guide on a rare occasion. We aren’t trying to hide functionalities from the users, nor are we trying to make this application look difficult for our target audience to use.

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The support for our application would be a simple FAQ section that would have the most frequently asked questions or answers to the more tricky functions. Certain answers would be answering which projects you can view as a user and where to access the roles of individuals within a project. A contact email would also be within the support section for a question not on the FAQ list or if the user just needed to get in contact with the application’s developers.

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