

# Application architecture – essay



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Application architecture is the organizational design of an entire software application, including all sub-components and external applications interchanges. There are several design patterns that are used to define an application architecture. These patterns help to communicate how an application will complete the necessary business processes as defined in the system requirements. A software application is a system designed to automate specific tasks in a logical manner to satisfy a set of requirements. Software applications rely on underlying operating systems and databases to store and perform tasks within the application.

The application architecture is the blueprint that defines how the software application will interact with servers and components within the domains of application layers. With the expansion of interoperability within software, modular components have been created that specialize in specific areas of business processes within an application. Application architecture is the process of defining all of the components within the design and how they will communicate within the application. This definition includes all layers of an application.

There are three main areas of control within all applications. These are the presentation layer, the business layer, and the data access layer. Each domain within an application has a specific responsibility that, when joined with the other layers, satisfy the underlying business requirements of an application. The application architecture is used as a blueprint to ensure that the underlying modules of an application will support future growth. Growth can come in the areas of future interoperability, increased resource demand, or increased reliability requirements.

With a completed application architecture, stakeholders understand the complexities of the underlying components should changes be necessary in the future. With the creation of advanced object-oriented programming, application architecture has become a vital component in defining how an application will function. This is due to the wide use of N-Tier applications in most enterprises. N-Tier applications enable the deployment of sub-components or modules across multiple servers within an enterprise.

When defining an application architecture, it is also important to define the application server architecture. This server architecture overlays the hardware design that will facilitate the deployment of components on the architecture. Good application server architectures should support both horizontal and vertical growth paradigms. Application service architecture defines how the application will make key business components available to other modules within an application. This service architecture is also included in the overall application architecture.

With the definition of interfaces available, interoperability between application layers is better understood by stakeholders within the organization. Processing payroll can be one of the most complex tasks facing an organization. Besides simply paying your employees, you will need to file taxes, submit reports and process year-end data for tax-reporting purposes. Choosing any kind of business system can be difficult, but getting a handle on your business plan can help; for that, I recommend Sample Business Plan. To determine the best payroll system for your company, consider the following points: What types of payroll systems are available? There are three basic types of payroll systems. •Manual payroll means that you, or <https://assignbuster.com/application-architecture-essay/>

another employee within your company, calculates the payroll each pay period entirely on paper. You will need to calculate taxes, insurance, 401K, and any other applicable deductions in addition to each employee's actual earnings. The advantage of using a manual system is that it is very inexpensive, with virtually no start-up costs. The disadvantage is that whatever you save on start-up costs will probably be eaten up by the amount of time it takes to process payroll.

In addition, it's very easy to make mistakes when processing payroll manually, and the penalty for mistakes, especially mistakes in taxing, can be very costly. There are at least free payroll templates out there, but it still difficult to do manual payroll processing. •The second type of payroll system is computerized. Many companies offer computer software that will assist you in processing payroll. You will need to input information for each employee when he is hired, but after that, the software will calculate payroll taxes and other deductions automatically.

Most programs will also process W-2 forms for each employee at year-end, which can be a real time-saver. The advantage of this type of payroll system are numerous - fewer potential mistakes and less time spent processing payroll. In addition, employees can be trained to run the program more easily, so you won't need to depend on just one person to process payroll. The disadvantages are that you still have to input each employee's hours manually, and the software has to be updated annually or whenever new tax laws go into effect.

There can also be additional charges if the software has to be configured specifically for your business. . As organizations move to service-oriented architectures (SOAs) where applications are composed via the assembly of reusable application interfaces and services, the role of the application architect becomes crucial to help reduce development time and costs while also enabling application and business agility. So, to net this out, implementing the role of the application architect is a critical success factor for SOA