

Duty/Task	Description	Skills / Education Required	Average Time Allotment %
Transform complex business requirements into highly scalable technical solutions	As the Product Owners bring business requirements from the business, they need to be transformed into technical solutions. This includes data modelling, creating new tables and/or modifying existing tables in the database, making necessary backend changes using web services, distributing work to other teams if there is a need to interact with different systems.	<ul style="list-style-type: none"> ➤ Bachelor's degree or equivalent in Computer Science, requires good knowledge on database design, system architecture and data structures. ➤ Need to be knowledgeable about Agile Scrum methodology as the developer need to understand how each requirement is transformed into User Stories in the Product Backlog. This requires knowledge of Software Engineering. ➤ Need to be knowledgeable about Use Case diagrams and Activity diagrams to understand the requirements. This requires knowledge of UML (Unified Modeling Language). 	10
Design and Development of Web Applications using SharePoint, Sitecore, .Net, ASP.Net MVC, C#, HTML5, CSS, AngularJS, Javascript.	Need to develop data templates, view/controller renderings in Sitecore, create data components in Sitecore that can be reused on several pages, create frontend user interface, develop backend functionality for the screens. Create SQL scripts to create, alter, modify tables in Oracle database, create indexes and create triggers.	<ul style="list-style-type: none"> ➤ Bachelor's degree in Computer Science. Requires knowledge of Object Oriented Programming, HTML, CSS, and Programming Languages that were covered in Bachelors and Master's. ➤ Requires Sitecore certification to understand the jargon, patterns, models, architecture of Sitecore and how it works with .Net and Angular JS to leverage Sitecore's capabilities to integrate with different systems. ➤ Requires knowledge of Visual Studio, .Net, ASP.Net MVC, C#, AngularJS (JavaScript) to write backend functionality to talk with the Customer Information System which were covered during Master's program ➤ Requires extensive knowledge of RDBMS such as SQL Server and/or Oracle to perform the DDL and DML tasks which were studied during bachelors and Master's programs. ➤ Requires certification in SharePoint to understand the SharePoint architecture, creating custom application pages, creating master pages, page layouts, site definitions, site columns, configuring SharePoint content deployment paths and jobs, overall architecture. ➤ Requires knowledge of tools like Visual Studio, SharePoint Designer, Microsoft SQL Server, Microsoft SharePoint Server, Sitecore XP, and SQL Developer. ➤ Requires knowledge of languages C#, SQL, PL/SQL, ASP and HTML, CSS, JavaScript. 	60
Unit and Integration testing of applications	Need to write Unit tests for the piece of code we develop and write integration tests for the code that integrates with other systems.	<ul style="list-style-type: none"> ➤ Ability to write Unit tests using Visual Studio and execute unit tests using Microsoft Test Manager for each piece of code that is developed. To perform this, knowledge of Microsoft Test Manager, understanding test cases, executing test cases is required ➤ Ability to write integration tests to make sure that the piece of code written integrates well with other backend systems. 	5

Deployment of applications to application servers making sure that the security of the applications follows high security standards	After the development of application is done, it needs to be hosted on an application server so it can be accessed by its users, be it an intranet application or an internet application. Deployment scripts need to be developed that does a web deploy and make configuration changes on each environment, configure security certificates and work with Network team on load balancing.	<ul style="list-style-type: none"> ➤ Bachelor's degree or equivalent in Computer Science, requires knowledge of different Windows Server Operating Systems, Application Servers to host the application on IIS server which was covered during Bachelors ➤ Requires knowledge of Network Systems, Network Protocols, and Security standards to protect the applications from hackers. This includes configuring transport level security and message level security, usage of Security Certificates etc., which were all studied during Bachelors and Master's programs. ➤ Writing deployment scripts using MS Deploy and adding configuration settings that need to change depending on environment is a must to have skill. ➤ Work with the network team to configure load balancing of applications to sustain high volume of traffic during peak periods. This requires knowledge of worker processes, multi-threading, network load balancing etc., 	10
Code maintenance using TFS and Git, branching strategies and feature branches	All the source code is present Team Foundation Server (TFS) and branching is done using Git. Need to create feature branches for the features being worked on, check-in/check-out files, make commits, perform pull, push, merge branch operations etc.,	<ul style="list-style-type: none"> ➤ Requires knowledge of Visual Studio, Team Foundation Server, Git, Git Extensions, Git commands to be able to perform operations like push/pull to pull/push code to/from repository, branching, build and deploy of branches etc ➤ As the code is also being worked on by fellow developers in feature branches, merge conflicts need to be solved on each subsequent pull from the repository into the working branch. 	10
Work on enhancements and defects that were identified in UAT and Production environments	Need to work on enhancements to the applications that come up as new requirements and/or defects that come up during UAT or in Production	<ul style="list-style-type: none"> ➤ Bachelor's degree or equivalent in Computer Science to understand the defect lifecycle. ➤ Need debugging skills to find exactly where the defect is and need knowledge of different defect tracking systems to track defects and assign them to other teams. ➤ Ability to understand the requirement for an enhancement and implement it to meet the business needs. 	5