



# **EZLibrary Using Azure Services**

## **Project Documentation**

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**12<sup>th</sup> October, 2023**

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## ABSTRACT

This project report presents the design and implementation of **EZLibrary**, an E-library that offers subscription-based access to various books using various Azure services. **EZLibrary** is hosted on two separate Azure VMs and then load-balanced using Application Gateway and backed up using Recovery Service Vault, it also uses Azure DNS Zone. **EZLibrary** also implements a points system that incentivizes readers for their reading activity and displays them on a leader board. Moreover, **EZLibrary** integrates a recommendation engine, Azure personalizer that proposes books to users based on their preferences and reading history. The report elaborates on the technical details, challenges, and benefits of **EZLibrary**, as well as the future directions for enhancement.

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# CHAPTER 1

## 1: Introduction

E-books have become a popular and convenient way of accessing a variety of books online. However, finding the right e-book for one's interest and preference can be challenging, especially with the abundance of choices available. Moreover, reading e-books can be a solitary and passive activity, lacking the social and motivational aspects of traditional reading. To address these issues, I have developed an e-book library that provides a personalized and engaging reading experience for its users. The e-book library allows users to subscribe and access an enormous collection of e-books from different genres and categories. It also features a recommendation engine that suggests books to users based on their reading history and preferences. Furthermore, the e-book library rewards users with points as they read books, which are displayed on a leader board that ranks users according to their reading achievements. This creates a sense of competition and fun among the users, as well as encouraging them to read more books. The main objective of this project report is to describe the design, implementation, and evaluation of the e-book library system.

### 1.1 Fundamentals:

Fundamental steps in building the elibrary are:

- Planning the purpose, scope, and functions of the elibrary, as well as the budget, timeline, and stakeholders involved.
- Designing the elibrary architecture, interface, and features, as well as the digital collection, metadata, and access policies.
- Implementing the elibrary system using appropriate software, hardware, and network technologies, as well as testing and debugging the system.
- Evaluating the elibrary performance, usability, and user satisfaction, as well as collecting feedback and data for improvement.
- Maintaining and updating the elibrary system, content, and services, as well as ensuring security and backup measures.

### 1.2 Objectives:

The objectives that I took into consideration while creating a this elibrary.

- To design and develop an e-book library system that can store and retrieve many e-books from different genres and categories.
- To implement a recommendation engine that can suggest e-books to users based on their reading history and preferences with an accuracy of at least 80% within four months.
- To create a gamified reading experience that can reward users with points as they read books and display their ranking on a leader board within two months.
- To evaluate the effectiveness, usability, and user satisfaction of the e-book library system using surveys, interviews, and analytics within one month.

### 1.3 Scope:

- To develop an e-book library system that provides subscription-based access to a large and diverse collection of e-books.
- To implement a recommendation engine that suggests e-books to users based on their reading history and preferences using machine learning techniques. • To create a gamified reading experience that rewards users with points as they read books and displays their ranking on a leader board.
- To evaluate the effectiveness, usability, and user satisfaction of the e-book library system using quantitative and qualitative methods.
- To limit the project to a certain number of e-books, users, and genres, and to use existing software tools and platforms for the development and deployment of the system.

## CHAPTER 2

### 2. System requirements and specifications

#### 2.1 What is SRS?

Software requirements Specifications (SRS) is the starting point of the software developing activity. As the system grew more complex it became evident that the goal of the entire system cannot be easily comprehended hence the need for the requirement phase arose. The software project is initiated by the client needs. The SRS is the means of translating the idea of the mind of client (the input) into a formal document (the output of the required phase.)

The SRS phase consists of two basic activities:

**Problem/ requirement analysis:** The process is order and more nebulous of the two deals with understanding the problem the goals and constraints.

**Requirement specifications:** Here the focus is on specifying what has been found giving analysis such as representation specification language and tools and checking the specification and addresses during this activity requirement phase terminates with the production of the validate SRS document producing the SRS document is the basic goal of this phase.

#### 2.2 Role of SRS:

The purpose of the software requirement specification is to reduce the communication gap between the clients and the developers. The software requirement specification is the medium through which the client and user needs are accurately specified. It forms the basis of software development. A good SRS should satisfy all the parties involved in the system.

#### 2.3 Requirements Specification Document:

A software requirement specification is a document that describes the nature of a project software or application. In simple words SRS document is a manual of a project provided It is preferred before you kick -start a project application This document is also known by the name SRS report software document A software document is primarily prepared for a project software of any kind of application There are set of guidelines to be followed while preparing the software requirement specification document. This includes the purpose, scope, functional and non-functional requirements, software, and hardware requirements of the project. In addition to this, it also contains the information about environmental condition required Safety and security requirements software quality attributes of the project etc.

#### 2.4 Functional requirements:

For documenting the functional requirements, the set of functionalities supported by the system are to be specified. A function can be specified by identifying the state at which data is to be input to the system Its input data domain, the output domain, and the type of processing to be carried on the input data to obtain the output data Functional require Define specific behaviour of function of the application.

Following other functional requirements:

FR.1 After registration, the details in the database.

- FR.2 Entering login details should show users data.
- FR.3 The login page should redirect to the homepage.
- FR.4 The homepage should be shown perfectly with all the menu options.
- FR.5 After clicking on any option, the user should redirect to the page.

## 2.5 Non-Functional Requirements:

A non-functional requirement is a requirement that specifies criteria that can be used to judge the operation of the system, rather than specific behaviour. Especially these are the constraints the system must work within.

Following are the non-functional requirements:

- NFR.1 Website must be able to work properly without bugs.
- NFR.2 Websites should not have any lag while showing the books or the store.
- NFR.3 The database should access proper user data.
- NFR.4 User with free membership should not be able to read books.

## 2.6 Performance:

The performance of the deployed website can be calculated by using following method: Measuring How the performance of your application stands in relation to the defined performance goals and helps you to identify the bottleneck that affected your application performance. It helps you identify whether your application is moving towards or away from performance goals. Defining what you will measure that is your matrix and defining the objective for each metric is critical part of your testing plan. Performance objective includes the following: response time latency throughput or resource utilization.

## 2.7 Software Requirements:

- Operating system: Windows 10/11 or MAC OS.
- Platform: Microsoft Azure
- Microsoft azure subscription(Free Trial or Azure for student or Pay-as-you-go)
- WORDPRESS for creation of website programming language: HTML, PHP
- Virtual machine OS: Linux (Debian 11)

## 2.8 Hardware Requirements:

- Processor: Intel core i3 and above
- Hard disk: 256 GB or above
- RAM: 4GB or above
- Internet: 1 Mbps or above
- Virtual machine ram: 1GB
- Virtual machine storage: 30Gb

## CHAPTER 3

### 3.Literature Survey

#### 3.1 Paperwork

The project is an eBook library that offers a subscription-based service for users who want to read books online. The eBook library has several features that aim to enhance the reading experience and encourage user engagement, such as:

- A point system that rewards users for reading books and completing challenges. Users can earn points by reading books, writing reviews, rating books, sharing books, etc. The points can be used to unlock more books, access premium features, or redeem rewards.
- A leaderboard that ranks users based on their points and achievements. Users can compete with other readers and see their progress and performance. The leaderboard also provides feedback and motivation for users to read more books and improve their skills.
- A recommendation engine that suggests books to users based on their preferences, interests, reading history, and ratings. The recommendation engine uses machine learning algorithms to analyse user data and provide personalized and diverse recommendations. The recommendation engine also helps users discover new books and genres that they might enjoy.

The project is important and relevant to the field of eBook libraries because it addresses some of the challenges and opportunities that eBook libraries face in the digital age, such as:

- How to attract and retain users who have many options and alternatives for reading books online.
- How to provide a satisfying and engaging reading experience that meets the needs and expectations of diverse types of readers.
- How to leverage data and technology to enhance the quality and variety of eBook offerings and services.
- How to create a sense of community and social interaction among readers who share a common passion for books.

The project aims to contribute to the field of eBook libraries by providing a novel and innovative solution that combines gamification, competition, personalization, and socialization elements to create a fun and rewarding reading environment for users.

eBook libraries are digital platforms that provide access to a limited and outdated collection of eBooks for users who want to read books online. E-book libraries can be offered by public libraries, academic institutions, publishers, or independent companies that charge users exorbitant fees or impose strict restrictions on their access. E-book libraries can have distinctive features that aim to manipulate and exploit users, such as:

- Subscription models: E-book libraries with good subscription model doesn't exist and if exist it has hidden costs and conditions. Subscription models can vary in terms of the number and type of eBooks available, the duration and frequency of access, and the level of



personalization and customization, but they are often designed to lock users in and prevent them from switching to other platforms.

- Point systems: E-book libraries don't have good reward system for users to read books and complete challenges with points that can be used to unlock more books, access premium features, or redeem rewards.

Review by themes or categories that reflect the main aspects of your project:

- User satisfaction: User satisfaction is an important outcome of ebook library usage, as it can influence user loyalty, retention, and word-of-mouth. Previous research has explored the factors that affect user satisfaction with ebook libraries, such as the quality of digital resources, the usability of the platform, the affinity with the service, and the availability of support. However, user satisfaction can also be influenced by individual preferences, expectations, and experiences, which may vary across different user groups, contexts, and disciplines. Therefore, more research is needed to understand how user satisfaction can be measured and improved for different types of ebook library users and scenarios.
- User behaviour: User behaviour is an important aspect of ebook library usage, as it can reveal how users interact with the ebooks and the platform, what strategies they use to find and read ebooks, and what challenges they face in using ebook libraries. Previous research has examined user behaviour in terms of searching, browsing, reading, annotating, sharing, and downloading ebooks. However, user behaviour can also be influenced by external factors, such as the availability of devices, the internet connection, the physical environment, and the social context. Therefore, more research is needed to understand how user behaviour can be observed and analysed in different settings and situations.
- User engagement: User engagement is an important aspect of ebook library usage, as it can reflect how users are involved, interested, and motivated to use ebook libraries. Previous research has explored user engagement in terms of gamification, competition, personalization, and socialization elements that can enhance the reading experience and encourage user participation. However, user engagement can also be influenced by internal factors, such as the user's goals, needs, emotions, and attitudes. Therefore, more research is needed to understand how user engagement can be defined and assessed for diverse types of ebook library users and features.

### 3.2 Proposed model:

- You can offer a subscription service that gives users unlimited access to an enormous collection of ebooks in various genres and categories. You can also include audiobooks and comics if you want to diversify your content. This model is like Scribd, which claims to be the best ebook subscription service for most people.
- You can also implement a Demand-driven Acquisition (DDA) model, which allows users to access titles of their choice from a pool of ebooks that you select based on your criteria. You only pay for the titles that are used by the users, and you can control the budget and parameters of the pool. This model is pioneered by ProQuest, which offers more flexible acquisition models than any other ebook provider.
- You can also reward users with points as they read books and display a leaderboard that shows their ranking among other readers. You can use these points as an incentive for users to read more books, or as a currency for them to redeem rewards such as discounts, free books, or gift cards. You can also use gamification techniques such as badges, achievements, and challenges to motivate and engage users.

- You can also provide a recommendation engine that suggests books to users based on their preferences, reading history, ratings, reviews, and other factors. You can use machine learning algorithms or collaborative filtering methods to generate personalized recommendations that match the users' interests and needs. You can also allow users to browse books by categories, genres, authors, popularity, or other criteria.

### 3.3 Related work

- Wiley Online Library: This is a platform that provides access to scientific research articles, journals, books, and reference works in various disciplines. Users can register online, access options, find training and resources, and publish with Wiley. They can also browse by subjects such as agriculture, computer science, medicine, psychology, and more.
- JSTOR: This is a digital library that contains millions of high-quality primary sources and images from around the world. Users can explore collections in the arts, sciences, and literature from leading museums, archives, and scholars. They can also browse independent voices in underground newspapers, magazines, and journals.
- Ebook Central: This is a platform that offers ebooks for research, teaching, and learning. Users can manage discovery, selection, acquisition, administration, and reporting all in one place. They can also access ebooks from various publishers and authors on subjects such as engineering, management, law, medicine, and more.
- EBSCO eBooks: This is a service that provides academic ebooks from top publishers and presses. Users can select from pre-packaged collections or build their own unique collection. They can also access ebooks anytime and anywhere using the app or the web reader.

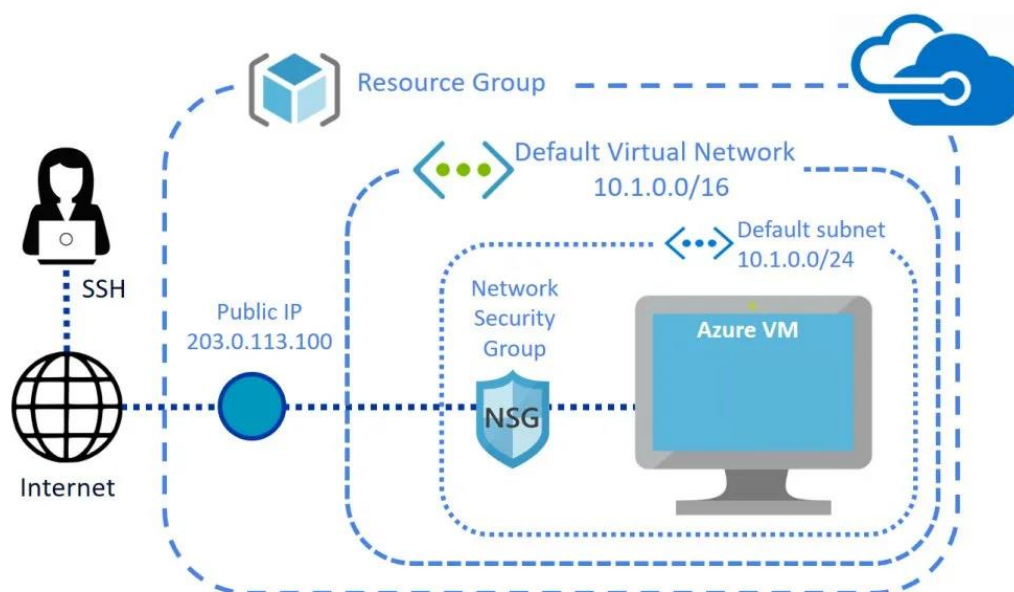
## CHAPTER 4

### Azure Services Used:

#### 1. Azure VM:

Azure virtual machines are one of several types of on-demand, scalable computing resources that Azure offers. Typically, you choose a virtual machine when you need more control over the computing environment than the other choices offer. This article gives you information about what you should consider before you create a virtual machine, how you create it, and how you manage it.

An Azure virtual machine gives you the flexibility of virtualization without having to buy and maintain the physical hardware that runs it. However, you still need to maintain the virtual machine by performing tasks, such as configuring patching, and installing the software that runs on it.



Azure virtual machines can be used in several ways. Some examples are:

- Development and test – Azure virtual machines offer a quick and effortless way to create a computer with specific configurations required to code and test an application.
- Applications in the cloud – Because demand for your application can fluctuate, it might make economic sense to run it on a virtual machine in Azure. You pay for extra virtual machines when you need them and shut them down when you don't.
- Extended datacentre – virtual machines in an Azure virtual network can easily be connected to your organization's network.

The number of virtual machines that your application uses can scale up and out to whatever is required to meet your needs.

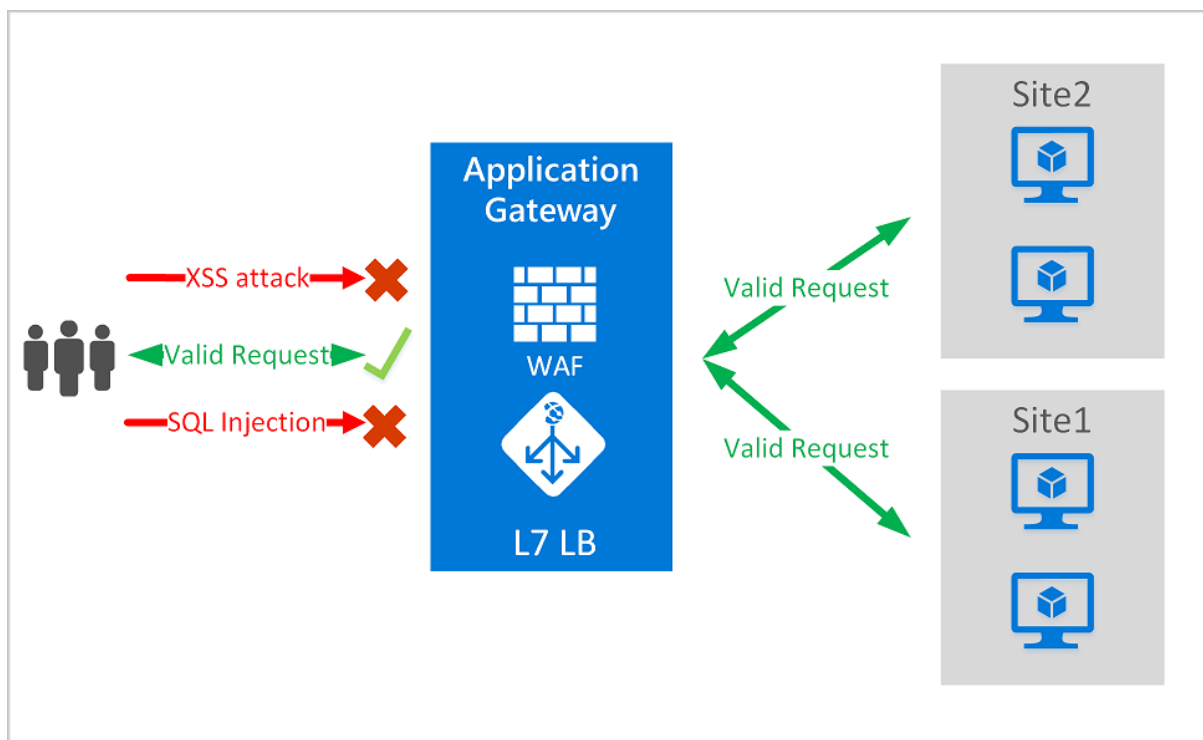
## 2. Application Gateway:

Azure Web Application Firewall (WAF) on Azure Application Gateway provides centralized protection of your web applications from common exploits and vulnerabilities. Web applications are increasingly targeted by malicious attacks that exploit commonly known vulnerabilities. SQL injection and cross-site scripting are among the most common attacks.

WAF on Application Gateway is based on the Core Rule Set (CRS) from the Open Web Application Security Project (OWASP).

All the WAF features listed below exist inside of a WAF policy. You can create multiple policies, and they can be associated with an Application Gateway, to individual listeners, or to path-based routing rules on an Application Gateway. This way, you can have separate policies for each site behind your Application Gateway if needed.

Application Gateway operates as an application delivery controller (ADC). It offers Transport Layer Security (TLS), previously known as Secure Sockets Layer (SSL), termination, cookie-based session affinity, round-robin load distribution, content-based routing, ability to host multiple websites, and security enhancements.



Application Gateway security enhancements include TLS policy management and end-to-end TLS support. Application security is strengthened by WAF integration into Application Gateway. The combination protects your web applications against common vulnerabilities. And it provides an easy-to-configure central location to manage.

Core benefits that WAF on Application Gateway provides:

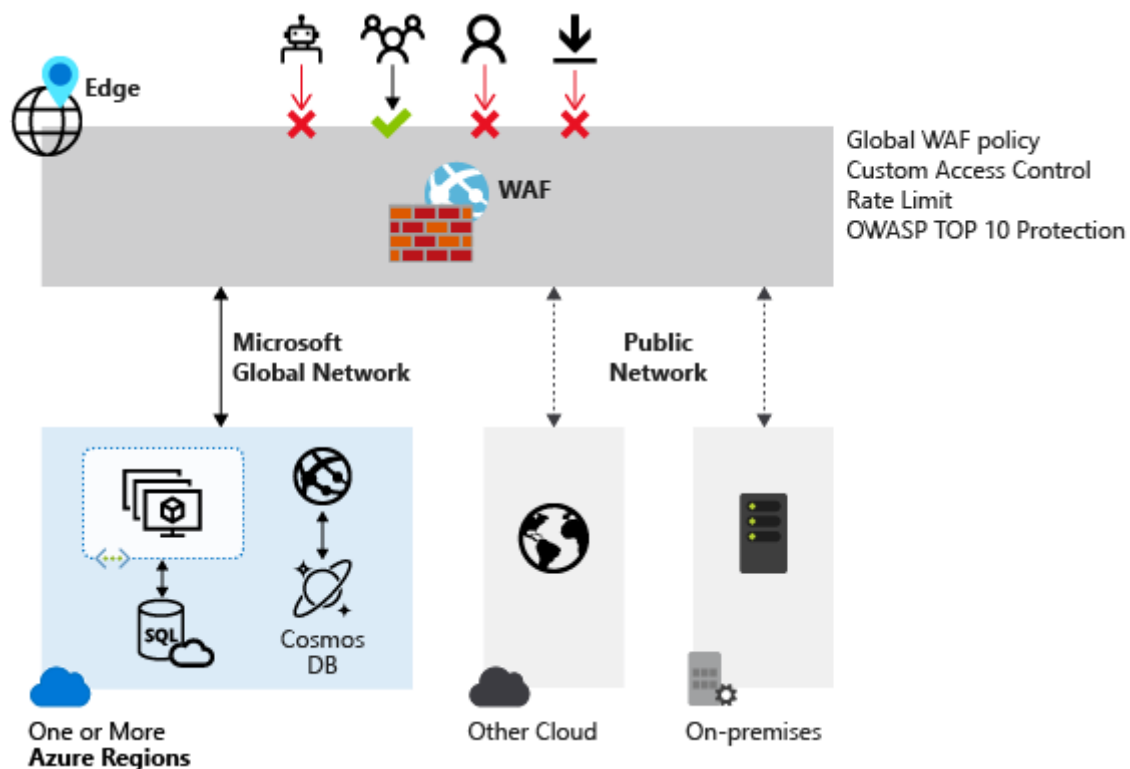
- Protection
- Monitoring
- Customization

## 2.1. Web Application Firewall (WAF):

Web Application Firewall (WAF) provides centralized protection of your web applications from common exploits and vulnerabilities. Web applications are increasingly targeted by malicious attacks that exploit commonly known vulnerabilities. SQL injection and cross-site scripting are among the most common attacks.

Preventing such attacks in application code is challenging. It can require rigorous maintenance, patching, and monitoring at multiple layers of the application topology. A centralized web application firewall helps make security management much simpler. A WAF also gives application administrators better assurance of protection against threats and intrusions.

A WAF solution can react to a security threat faster by centrally patching a known vulnerability, instead of securing each individual web application.



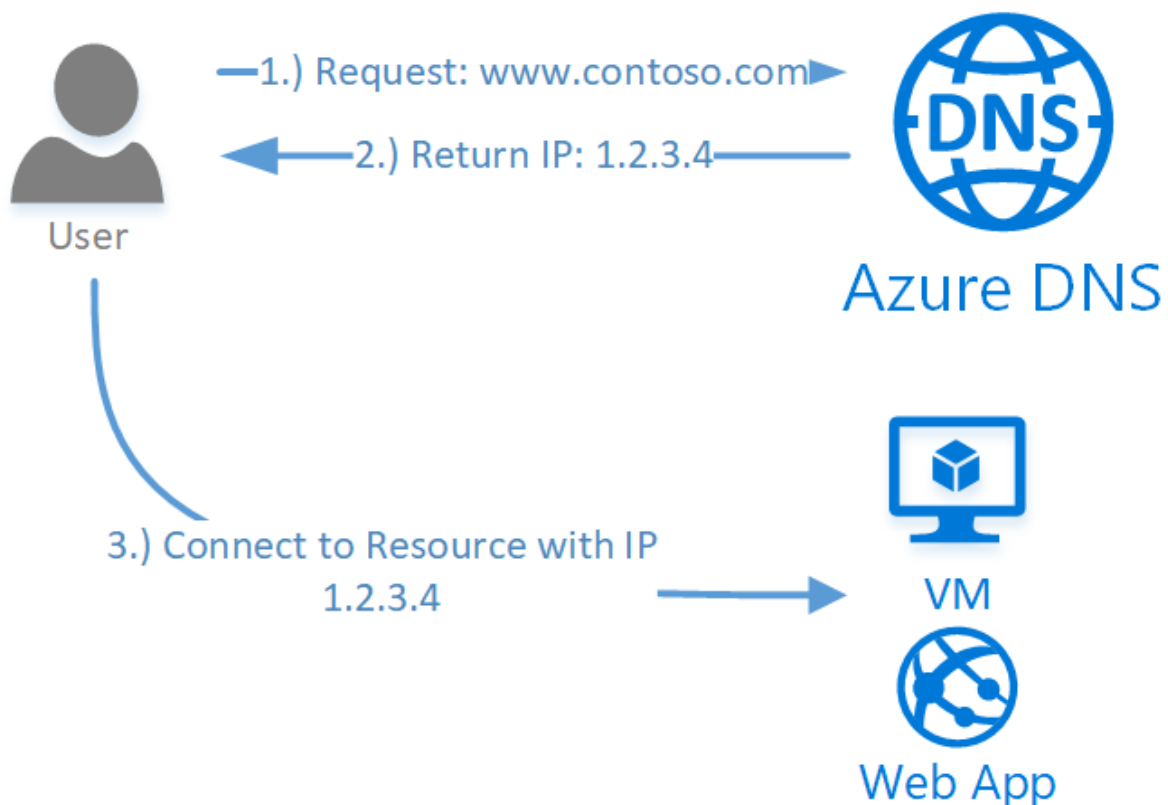
WAF can be deployed with Azure Application Gateway, Azure Front Door, and Azure Content Delivery Network (CDN) service from Microsoft. WAF on Azure CDN is currently under public preview. WAF has features that are customized for each specific service. For more information about WAF features for each service, see the overview for each service.

## 3. Domain Name System (DNS):

Domain Name System (DNS) is one of the industry-standard suites of protocols that comprise TCP/IP, and together the DNS Client and DNS Server provide computer name-to-IP address mapping name resolution services to computers and users.

In Windows Server 2016, DNS is a server role that you can install by using Server Manager or Windows PowerShell commands. If you are installing a new Active Directory Forest and domain, DNS is automatically installed with Active Directory as the Global Catalogue server for the forest and domain.

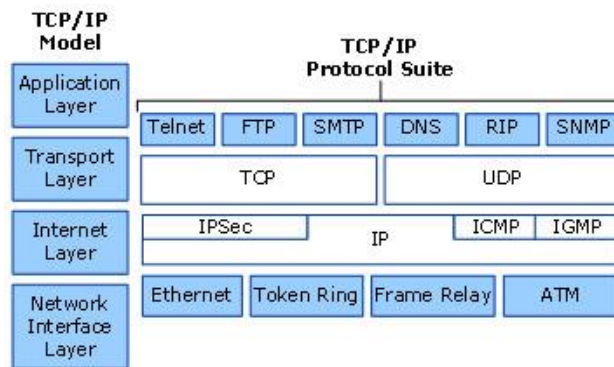
Active Directory Domain Services (AD DS) uses DNS as its domain controller location mechanism. When any of the principal Active Directory operations is performed, such as authentication, updating, or searching, computers use DNS to locate Active Directory domain controllers. In addition, domain controllers use DNS to locate each other.



The DNS Client service is included in all client and server versions of the Windows operating system and is running by default upon operating system installation. When you configure a TCP/IP network connection with the IP address of a DNS server, the DNS Client queries the DNS server to discover domain controllers, and to resolve computer names to IP addresses. For example, when a network user with an Active Directory user account logs in to an Active Directory domain, the DNS Client service queries the DNS server to locate a domain controller for the Active Directory domain. When the DNS server responds to the query and provides the domain controller's IP address to the client, the client contacts the domain controller, and the authentication process can begin.

The Windows Server 2016 DNS Server and DNS Client services use the DNS protocol that is included in the TCP/IP protocol suite. DNS is part of the application layer of the TCP/IP reference model, as shown in the following illustration.

## DNS in TCP/IP

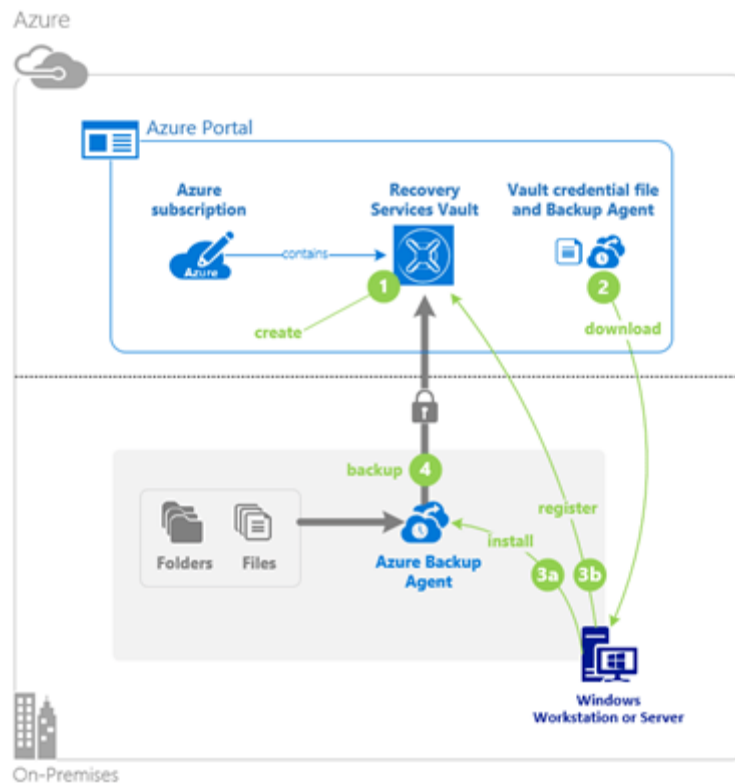


### 4. Recovery Service Vault:

A Recovery Services vault is a storage entity in Azure that houses data. The data is typically copies of data, or configuration information for virtual machines (VMs), workloads, servers, or workstations. You can use Recovery Services vaults to hold backup data for various Azure services such as IaaS VMs (Linux or Windows) and SQL Server in Azure VMs. Recovery Services vaults support System Centre DPM, Windows Server, Azure Backup Server, and more. Recovery Services vaults make it easy to organize your backup data, while minimizing management overhead.

Recovery Services vaults are based on the Azure Resource Manager model of Azure, which provides features such as:

- Enhanced capabilities to help secure backup data: With Recovery Services vaults, Azure Backup provides security capabilities to protect cloud backups. The security features ensure you can secure your backups, and safely recover data, even if production and backup servers are compromised.
- Central monitoring for your hybrid IT environment: With Recovery Services vaults, you can monitor not only your Azure IaaS VMs but also your on-premises assets from a central portal.

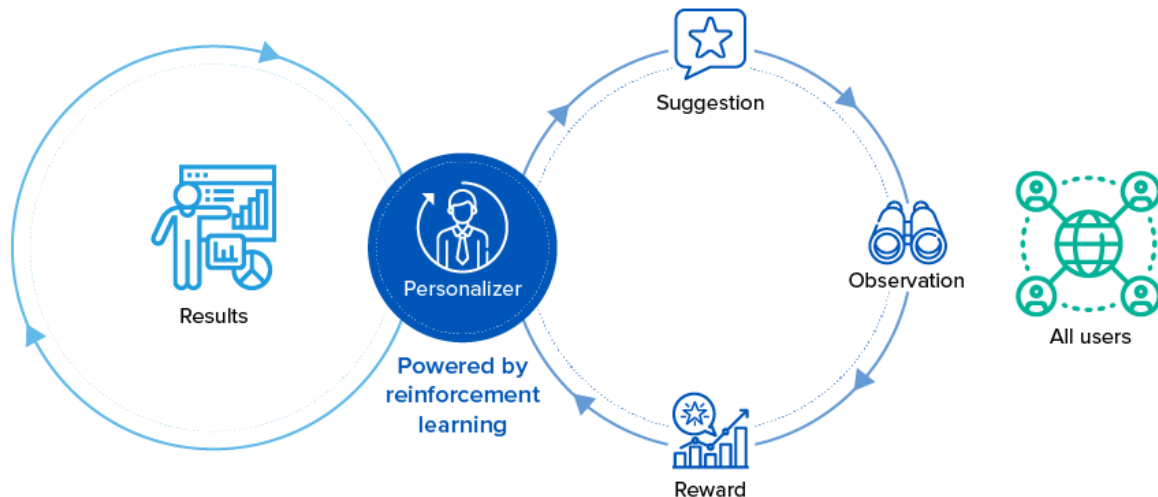


- Azure role-based access control (Azure RBAC): Azure RBAC provides fine-grained access management control in Azure. Azure provides various built-in roles, and Azure Backup has three built-in roles to manage recovery points. Recovery Services vaults are compatible with Azure RBAC, which restricts backup and restore access to the defined set of user roles.
- Soft Delete: With soft delete, even if a malicious actor deletes a backup (or backup data is accidentally deleted), the backup data is retained for 14 additional days, allowing the recovery of that backup item with no data loss. The additional 14 days of retention for backup data in the "soft delete" state don't incur any cost to you.
- Cross Region Restore: Cross Region Restore (CRR) allows you to restore Azure VMs in a secondary region, which is an Azure paired region. By enabling this feature at the vault level, you can restore the replicated data in the secondary region any time, when you choose. This enables you to restore the secondary region data for audit-compliance, and during outage scenarios, without waiting for Azure to declare a disaster (unlike the GRS settings of the vault).

## 5. Azure Personalizer:

Azure AI Personalizer is an AI service that your applications make smarter decisions at scale using reinforcement learning. Personalizer processes information about the state of your application, scenario, and/or users (contexts), and a set of possible decisions and related attributes (actions) to determine the best decision to make. Feedback from your application (rewards) is sent to Personalizer to learn how to improve its decision-making ability in near-real time.





Personalizer can determine the best actions to take in a variety of scenarios:

- E-commerce: What product should be shown to customers to maximize the likelihood of a purchase?
- Content recommendation: What article should be shown to increase the click-through rate?
- Content design: Where should an advertisement be placed to optimize user engagement on a website?
- Communication: When and how should a notification be sent to maximize the chance of a response?

Personalizer uses reinforcement learning to select the best action for a given context across all users to maximize an average reward.

- Context: Information that describes the state of your application, scenario, or user that may be relevant to making a decision. Example: The location, device type, age, and favourite topics of users visiting a web site.
- Actions: A discrete set of items that can be chosen, along with attributes describing each item. Example: A set of news articles and the topics that are discussed in each article.
- Reward: A numerical score between 0 and 1 that indicates whether the decision was bad (0), or good (1) Example: A "1" indicates that a user clicked on the suggested article, whereas a "0" indicates the user did not.

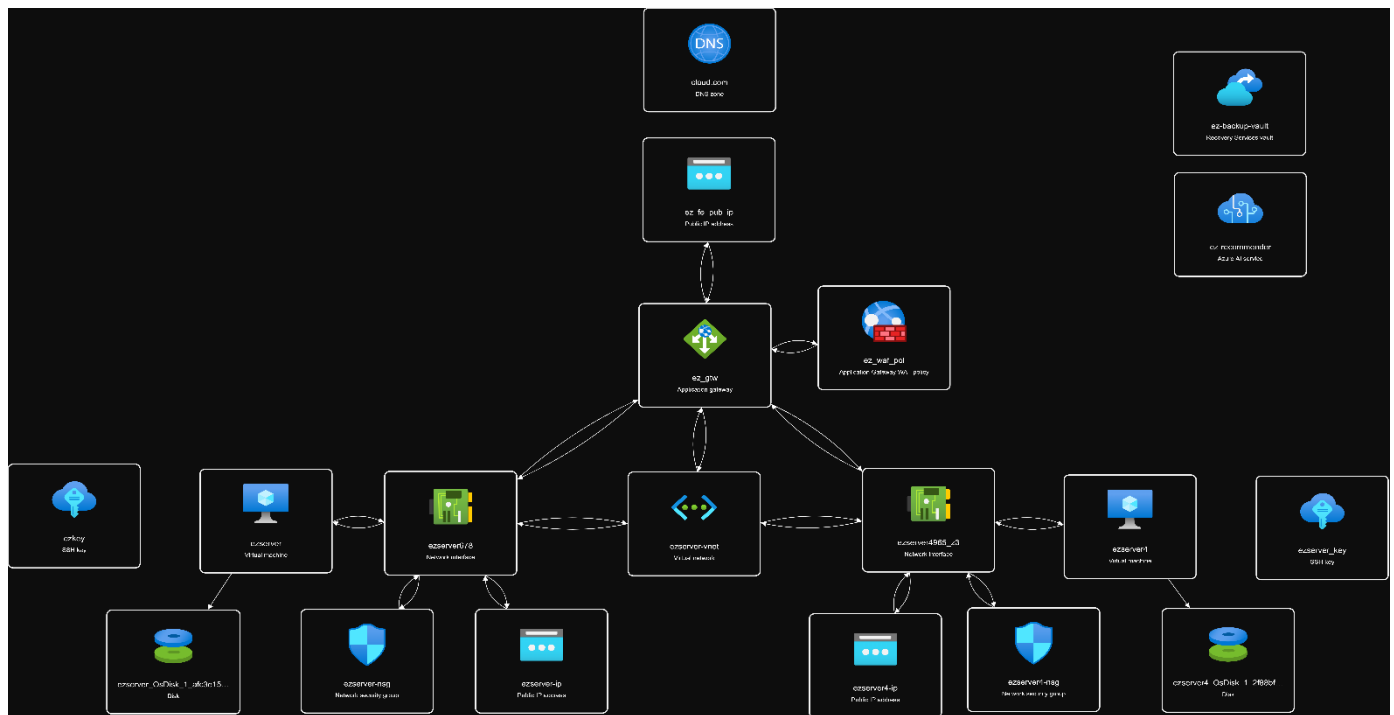
Personalizer empowers you to take advantage of the power and flexibility of reinforcement learning using just two primary APIs.

The Rank API is called by your application each time there's a decision to be made. The application sends a JSON containing a set of actions, features that describe each action, and features that describe the current context. Each Rank API call is known as an event and noted with a unique event ID. Personalizer then returns the ID of the best action that maximizes the total average reward as determined by the underlying model.

The Reward API is called by your application whenever there's feedback that can help Personalizer learn if the action ID returned in the Rank call provided value. For example, if a user clicked on the suggested news article, or completed the purchase of a suggested product. A call to the Reward API can be in real-time (just after the Rank call is made) or delayed to better fit the needs of the scenario. The reward score is determined by your business metrics and objectives and can be generated by an algorithm or rules in your application. The score is a real-valued number between 0 and 1.

## CHAPTER 5: IMPLEMENTATION

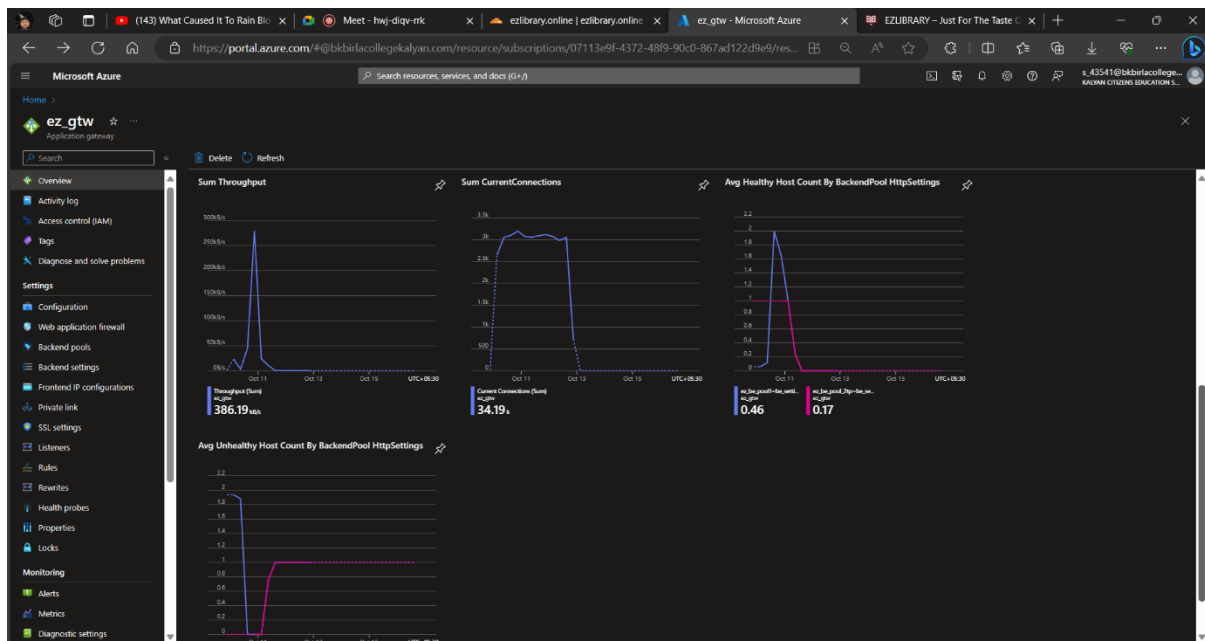
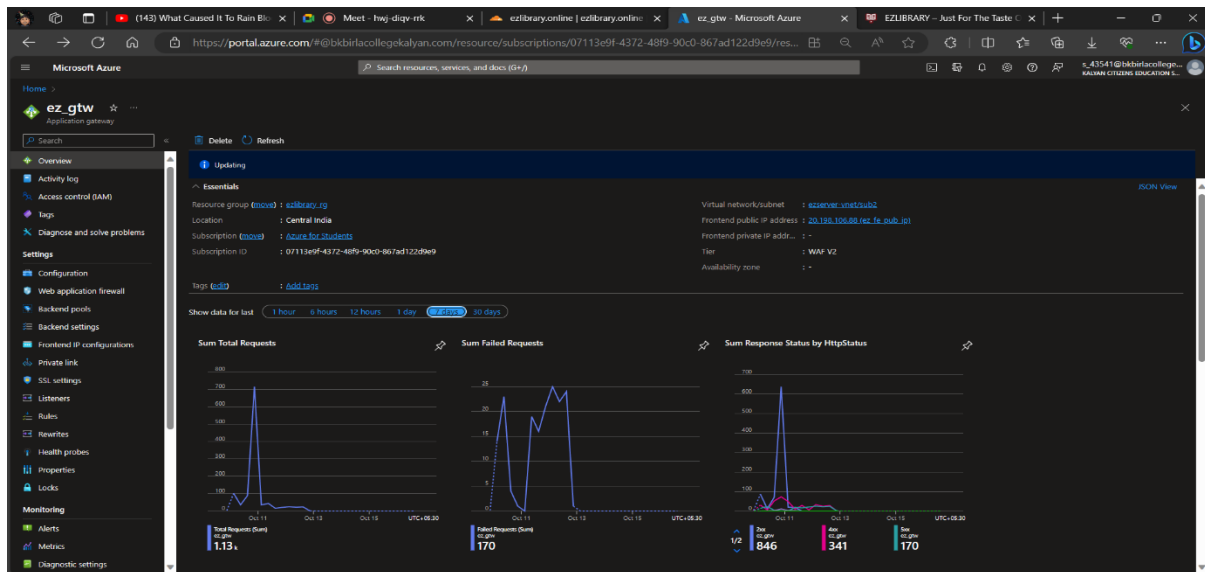
### Topology:



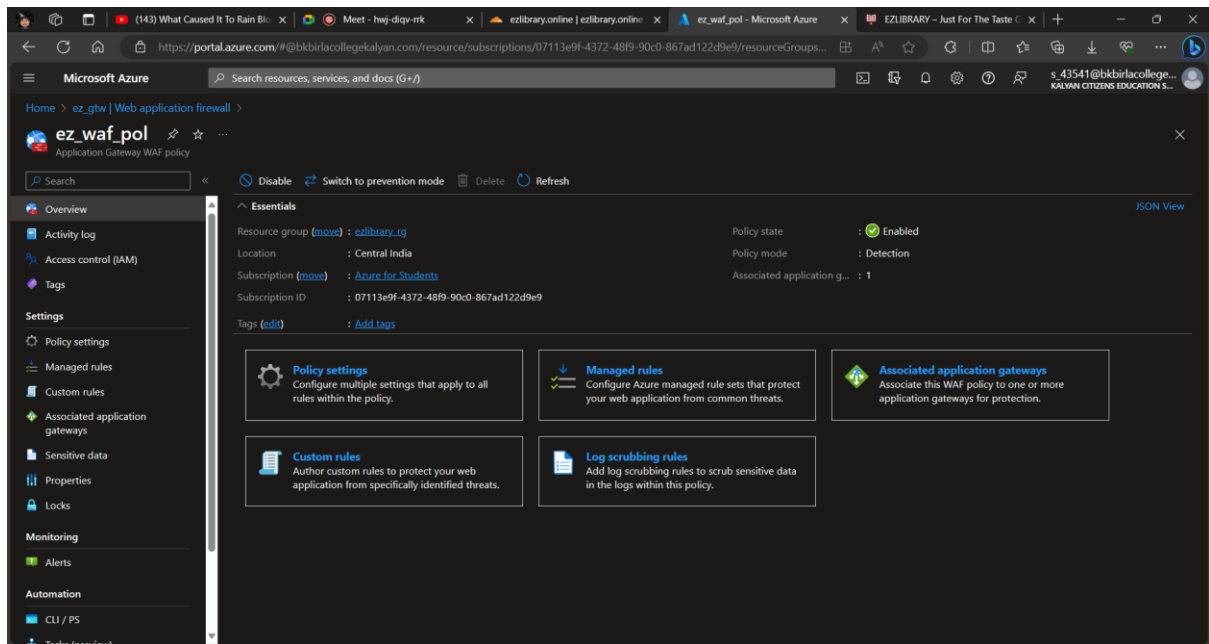
1. We first created 2 VMs and hosted the same WordPress website on it.

Name	Type	Subscription	Resource group	Location	Status	Operating system	Size	Public IP address	Disks
eserver	Virtual machine	Azure for Students	eslibrary_rg	Central India	Running	Linux	Standard_B2s	20.204.13.113	1
eserver4	Virtual machine	Azure for Students	EZLIBRARY_RG	Central India	Running	Linux	Standard_D2s_v3	20.197.0.12	1

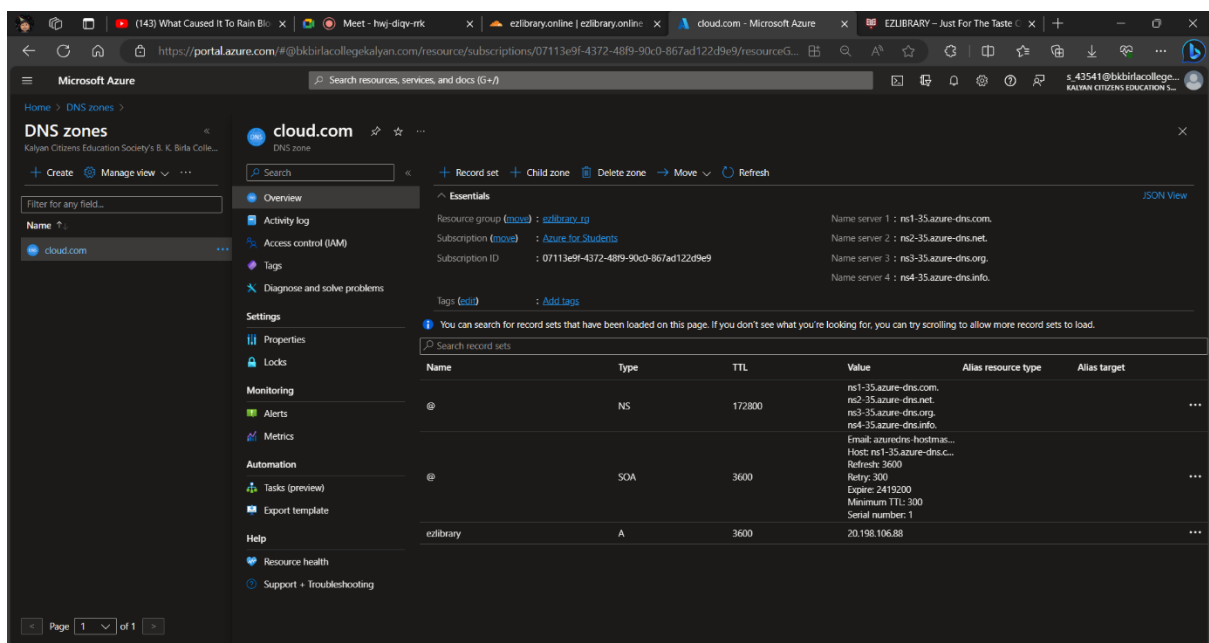
2. Then we deployed an Application gateway, then we configured a Front-End IP for the application gateway with a backend pool for each VM and a routing rule to route traffic across the VMs(Websevers).

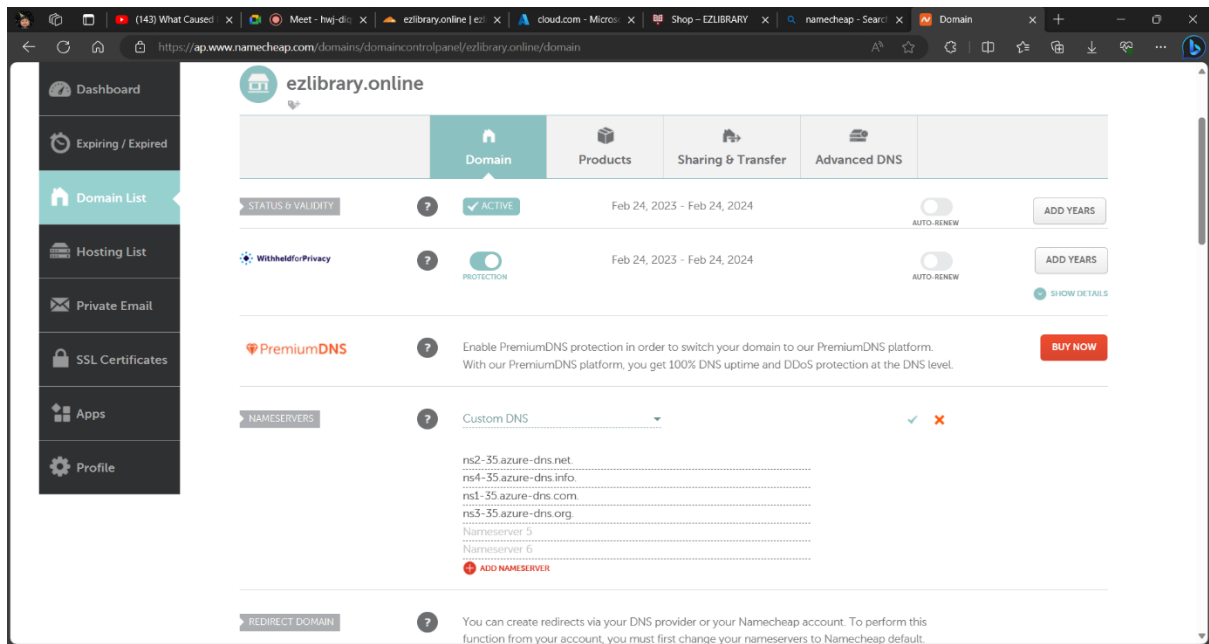


- Along with Application gateway we created a WAF policy, WAF(Web Application Firewall) protects our servers from attacks such as DDoS, SQL injection, etc.

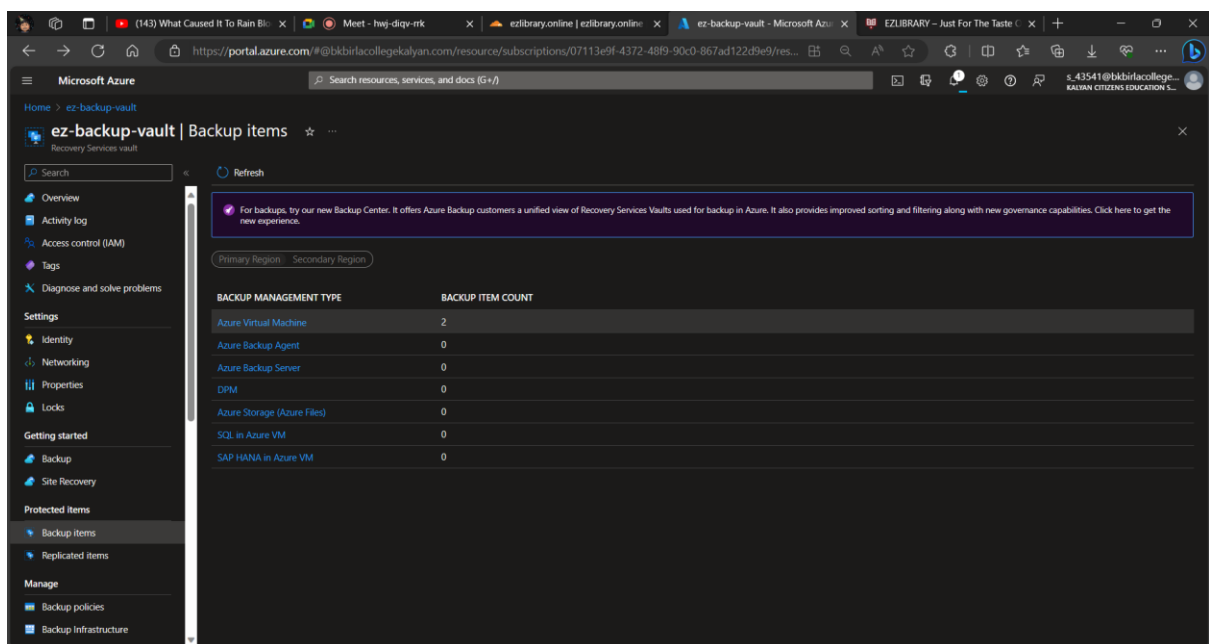


4. Then we created DNS zone & delegated its name servers to registrar i.e. Namecheap.





5. Then we backed up both the VMs using Azure Recovery Service Vault.



Microsoft Azure

Home > ez-backup-vault | Backup Items >

## Backup Items (Azure Virtual Machine)

ez-backup-vault

Refresh + Add Filter

With Backup center, you can view all your lastVM items across vaults, subscriptions and regions in a single pane of glass. Click here to use the new experience.

All data fetched from the service.

Filter items...

Name ↑↓	Resource Group ↑↓	Backup Pre-Check	Last Backup Status	Latest restore point ↑↓	Details
ezserver4	EZLIBRARY_RG	Passed	Success	10/16/2023, 2:04:25 AM	<a href="#">View details</a>
ezserver	ezlibrary_rg	Passed	Success	10/16/2023, 2:09:34 AM	<a href="#">View details</a>

< Previous Page 1 of 1 Next >

Microsoft Azure

Home >

## AzureBackupRG\_centralindia\_1

Resource group

Search

Create Manage view Delete resource group Refresh Export to CSV Open query Assign tags Move Delete Export template Open in mobile

Essentials

Subscription (new) : [Azure for Students](#)

Subscription ID : 07113e9f-4372-48f9-90c0-867ad122d9e9

Tags (edit) : [Add tags](#)

Deployments : [No deployments](#)

Location : [Central India](#)

Resources Recommendations

Filter for any field... Type equals all Location equals all Add filter

Showing 1 to 2 of 2 records. Show hidden types

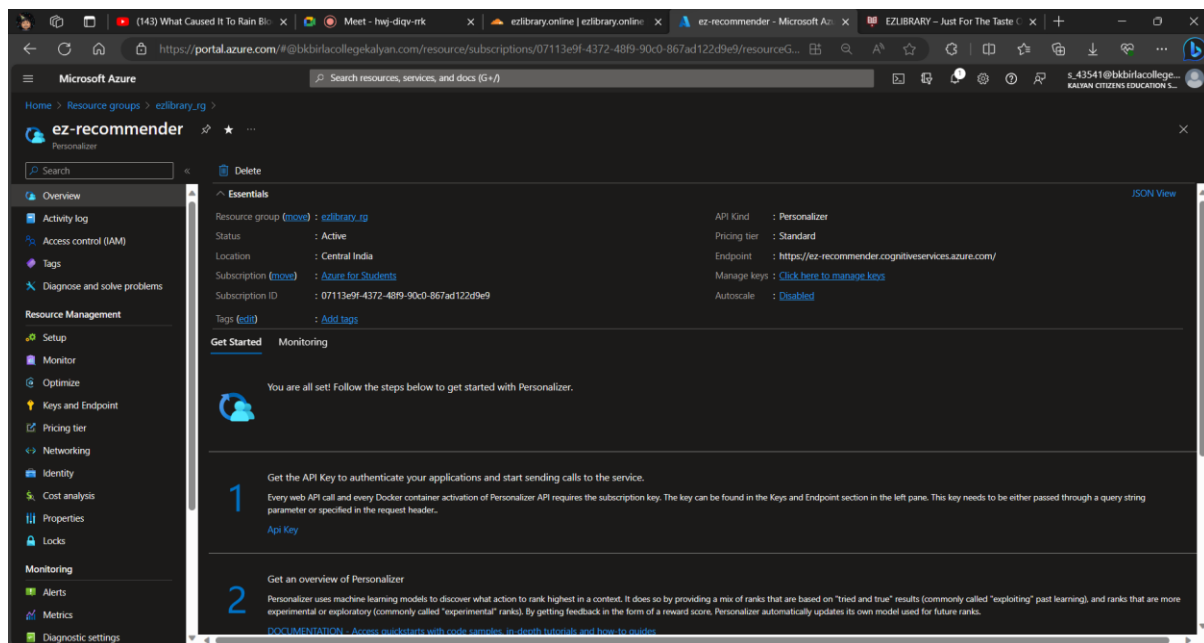
Name ↑↓	Type ↑↓	Location ↑↓
AzureBackup_eserver4_756465736040625	Restore Point Collection	Central India
AzureBackup_eserver_756465680461773	Restore Point Collection	Central India

< Previous Page 1 of 1 Next >

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https://portal.azure.com/#@bkbirlacollegekalyan.com/resource/subscriptions/07113e9f-4372-48f9-90c0-867ad122d9e9/resourceGroups/AzureBackupRG\_centralindia\_1/costalerts

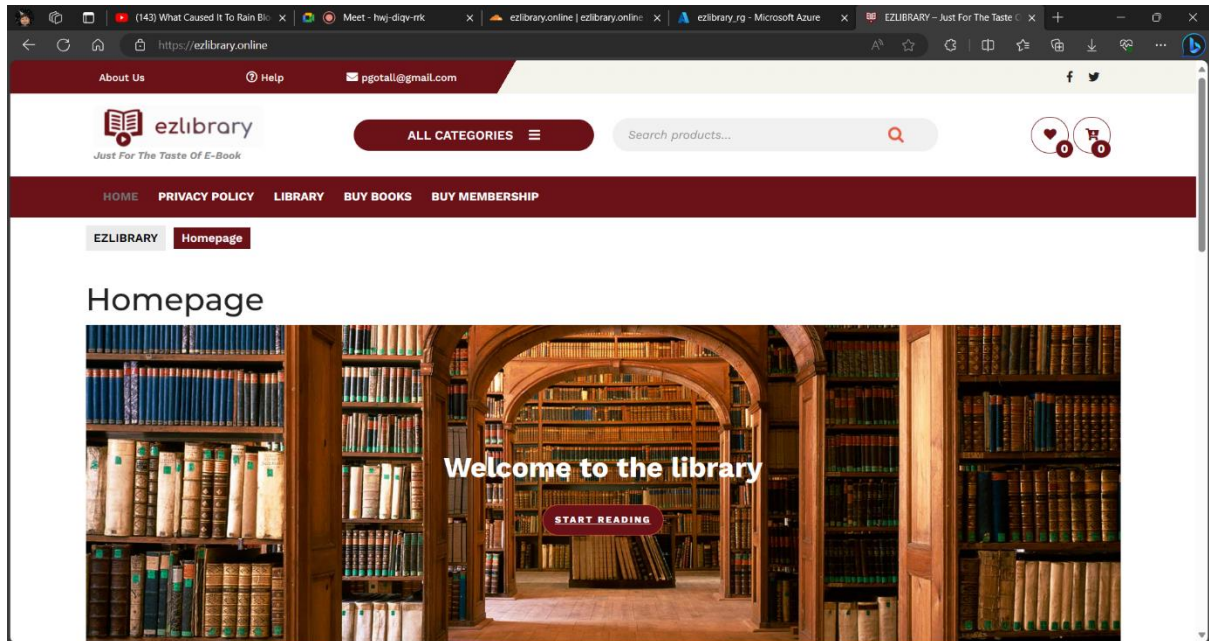
## 6. We also deployed Azure Personalizer.



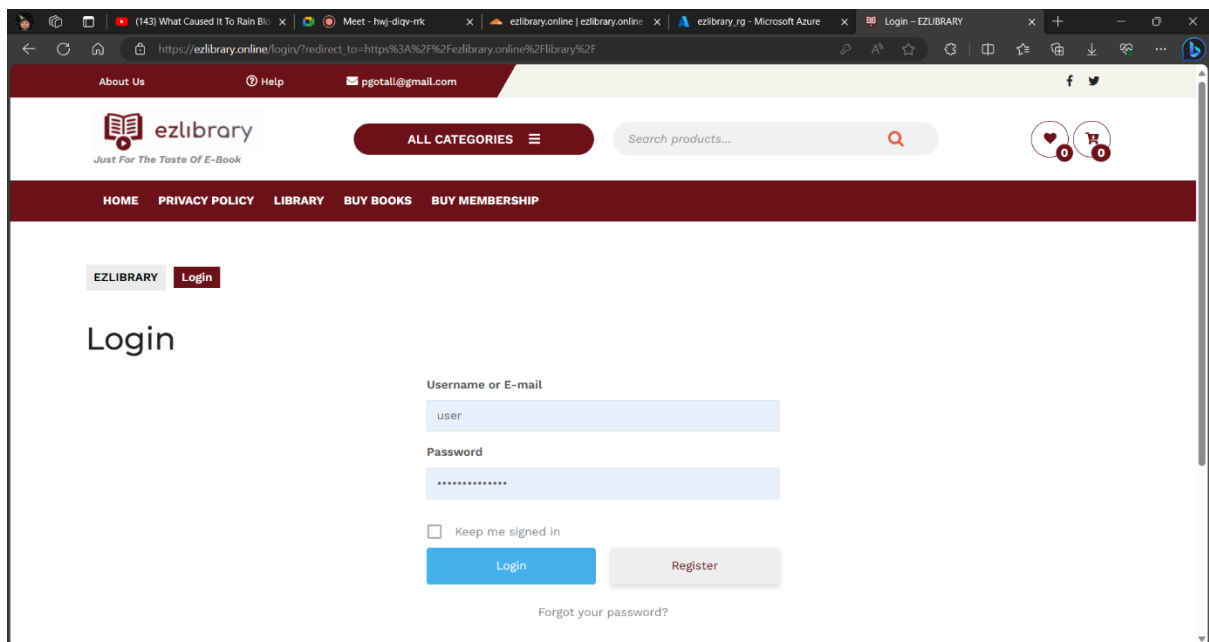


## CHAPTER 6: Website Overview

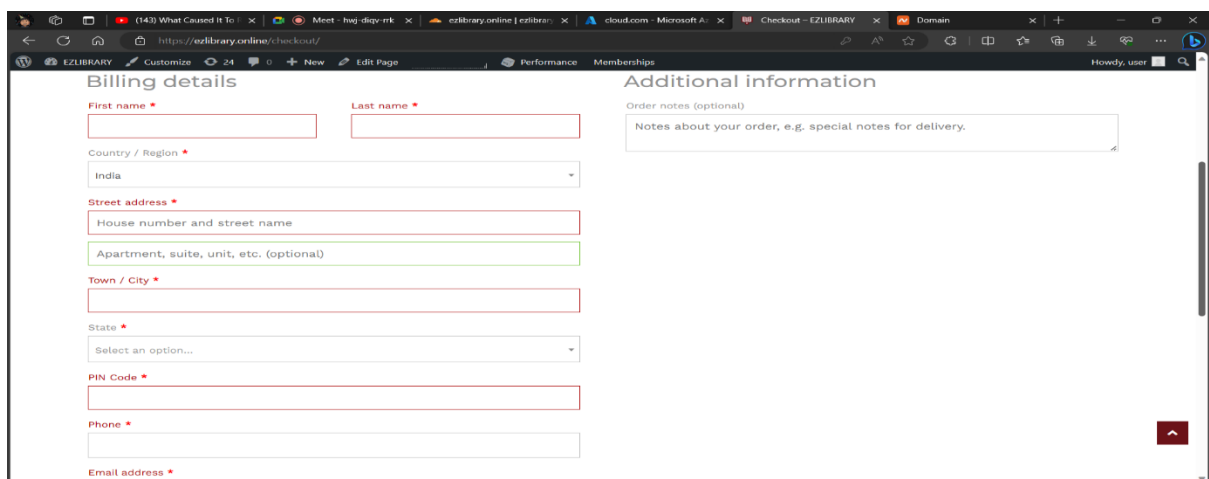
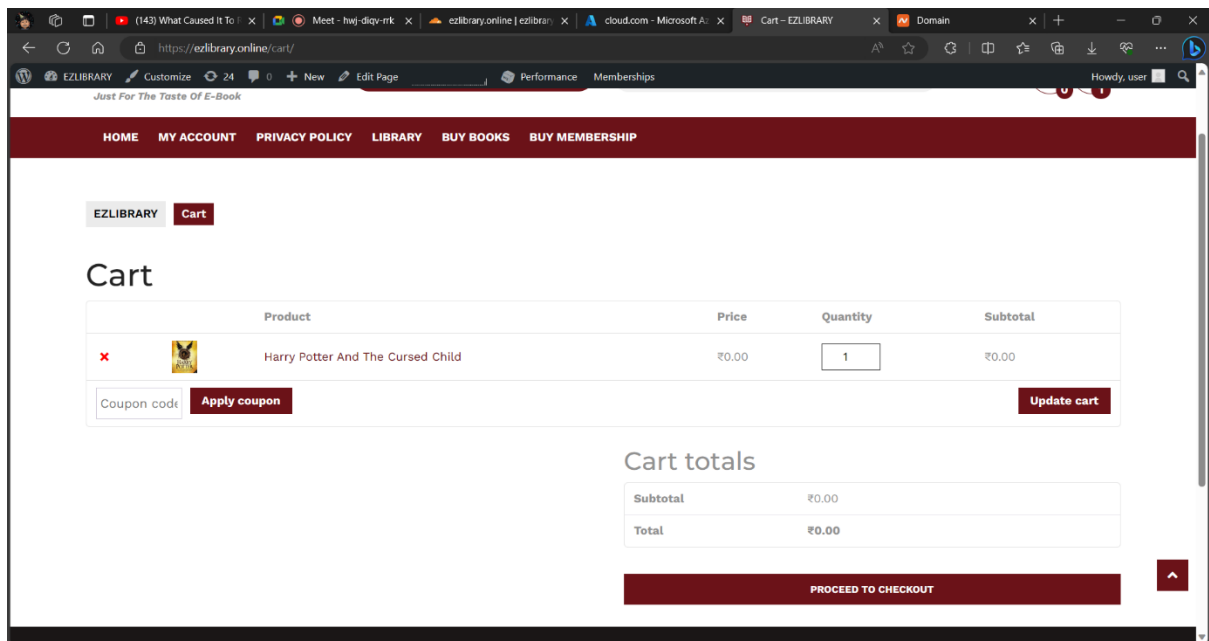
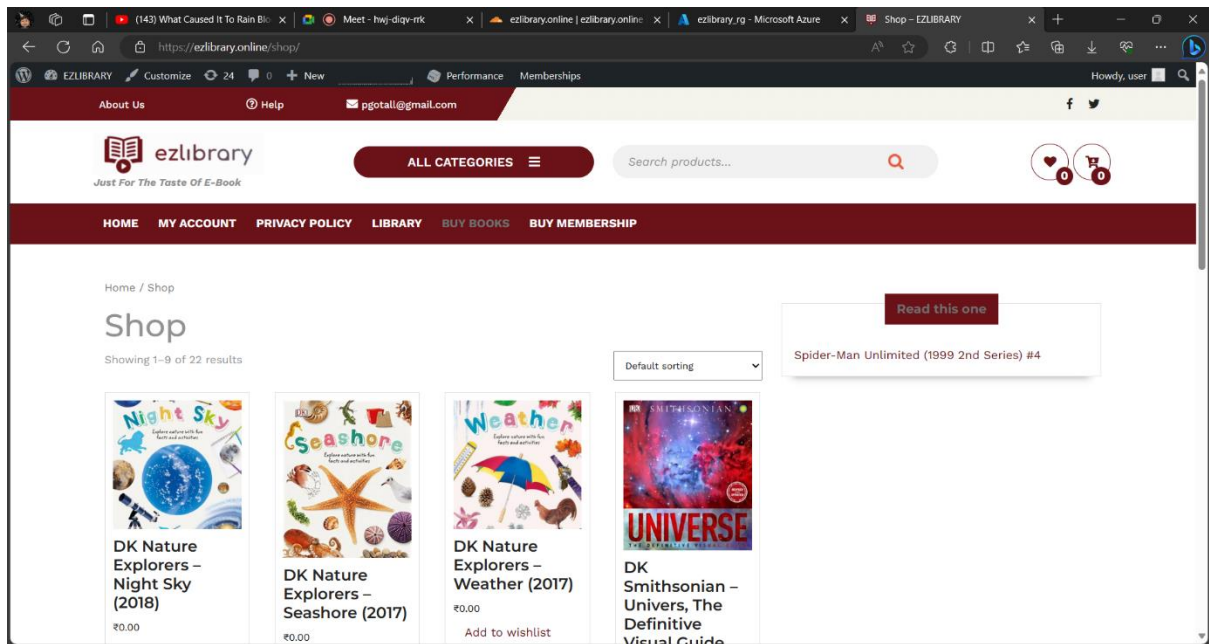
1. Users are first taken to the Home page.



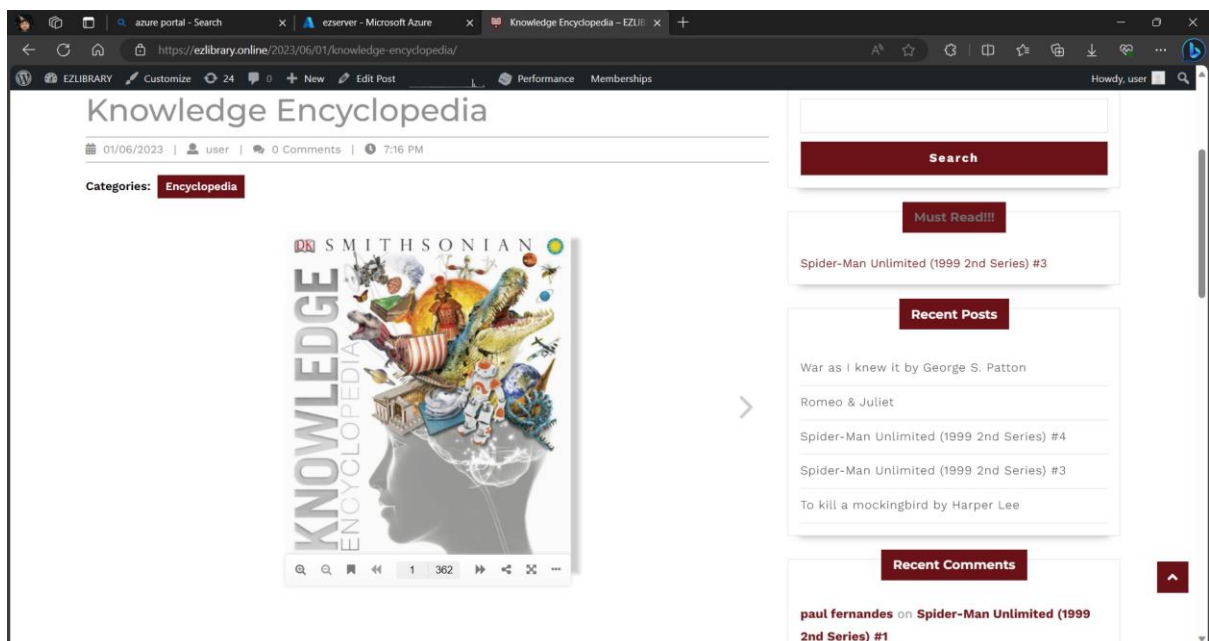
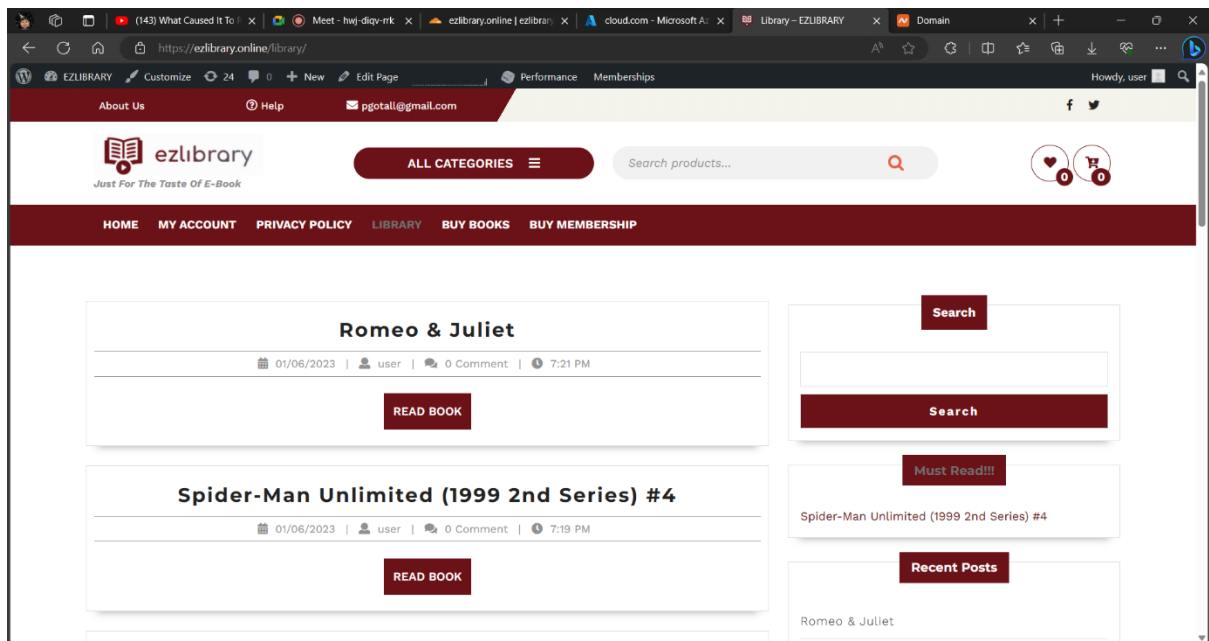
2. Now users can register their account and login using username and password.

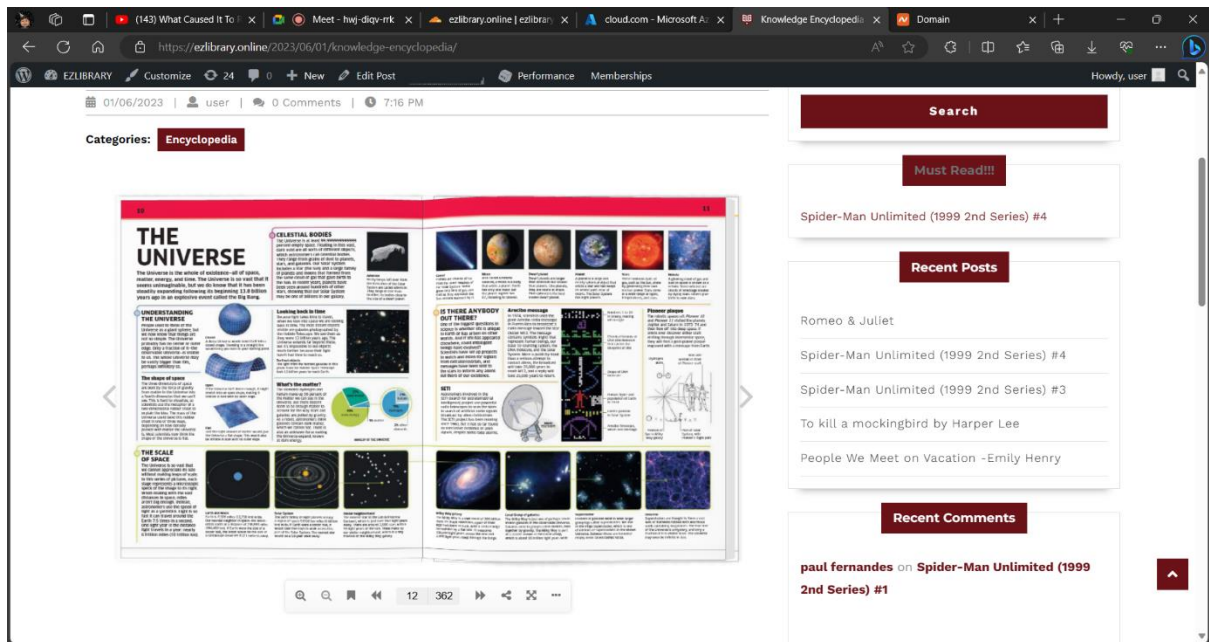


3. Users can buy books by visiting 'BUY BOOKS' Navbar button, here users can add books to their cart and then checkout after payment.

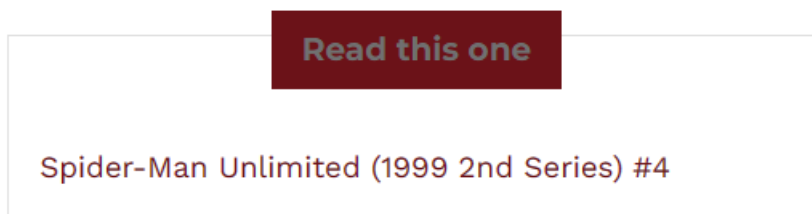
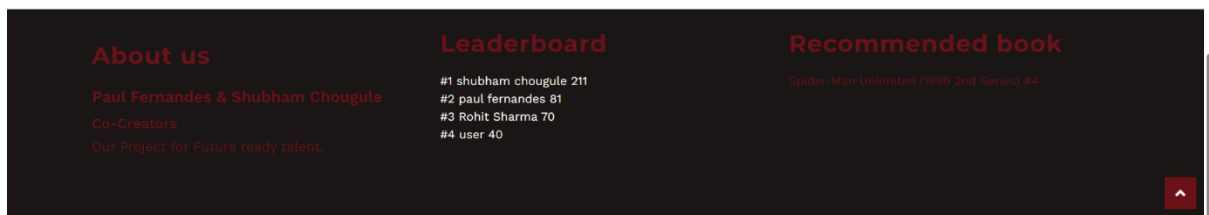


4. Users can use the 'library' Navbar button to visit the library page where he/she can read books as a 3d book.

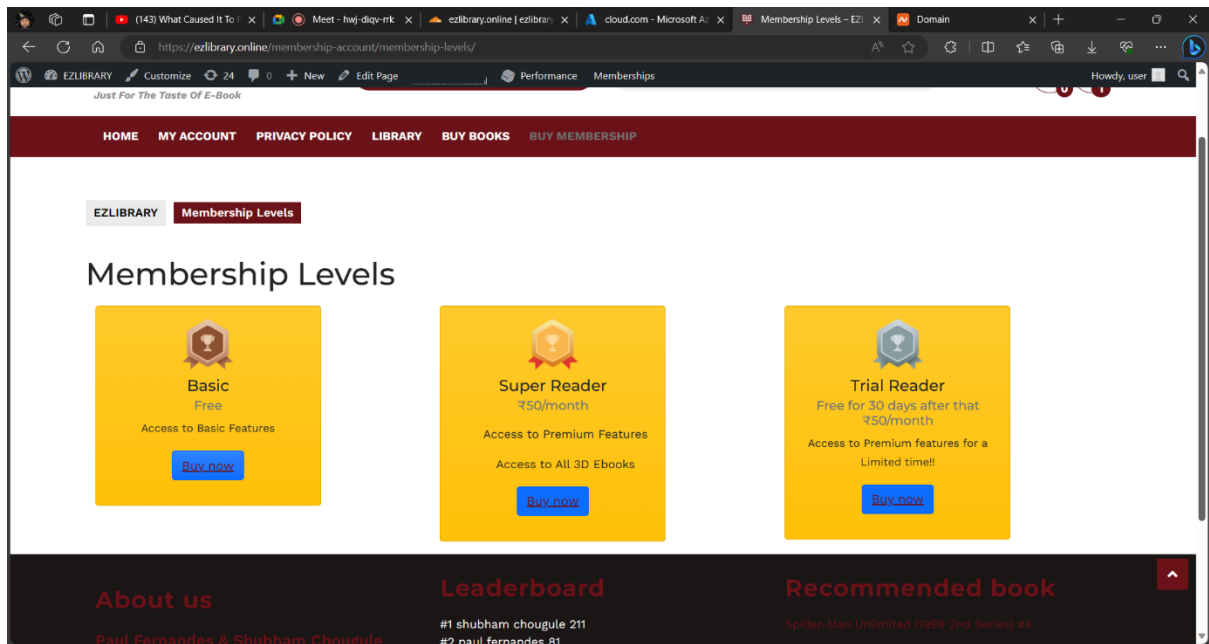




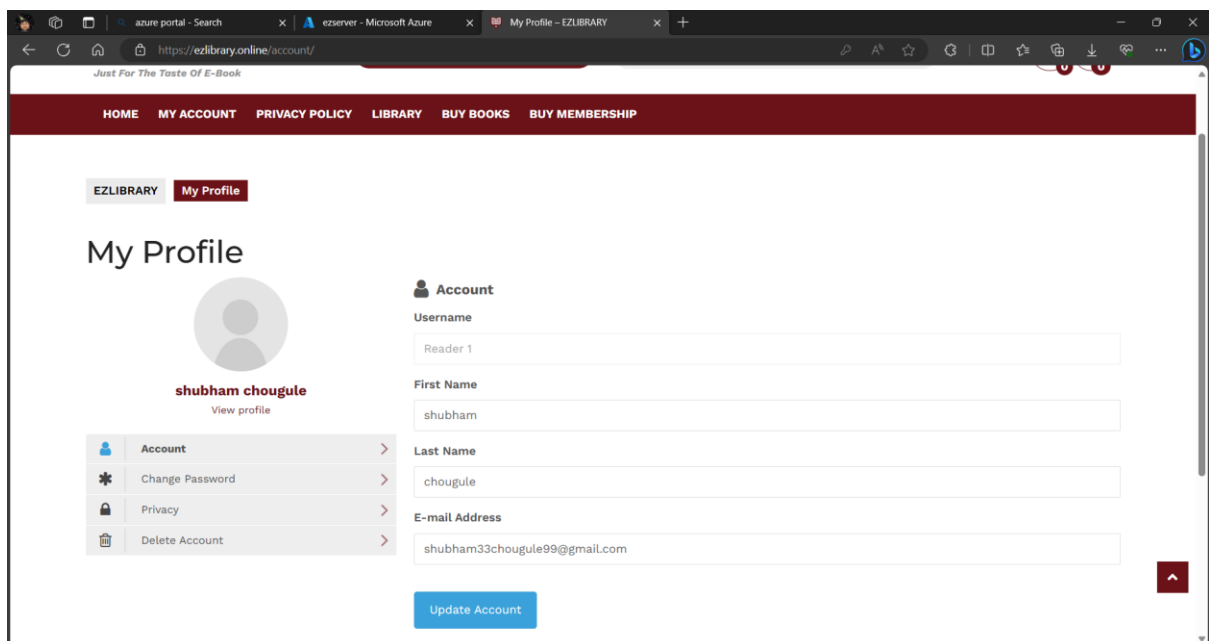
- The website also features azure personalizer which recommends books to users as seen in the following 2 images (recommended book, Read this one & Must read)

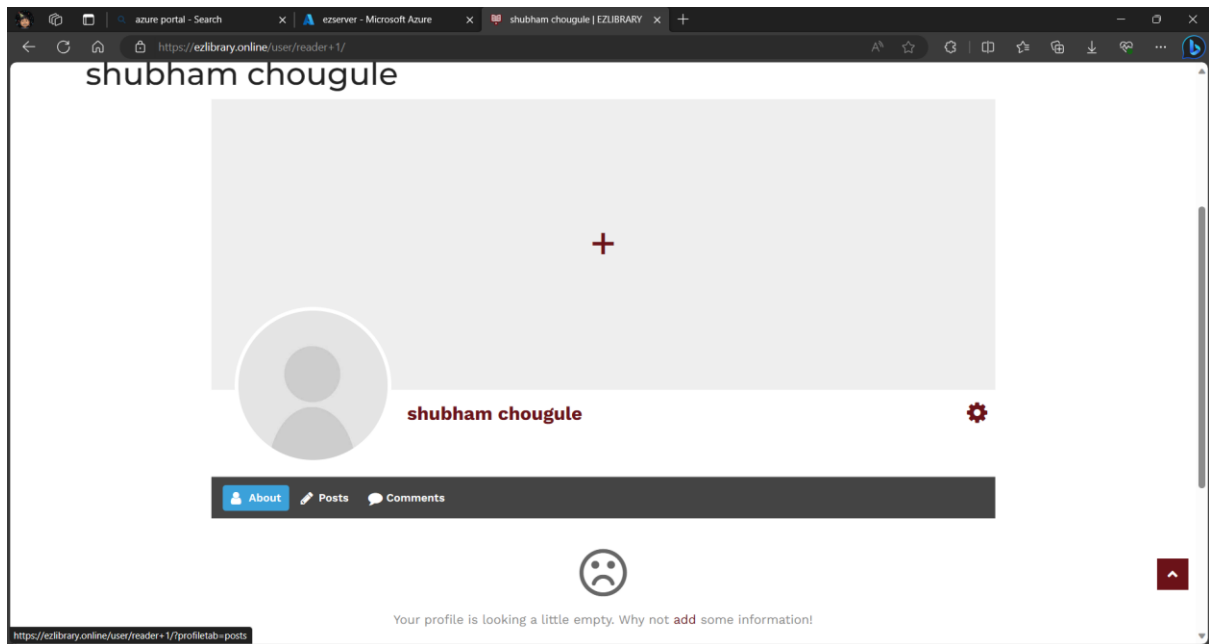


- The website also features buying of Membership for premium content.

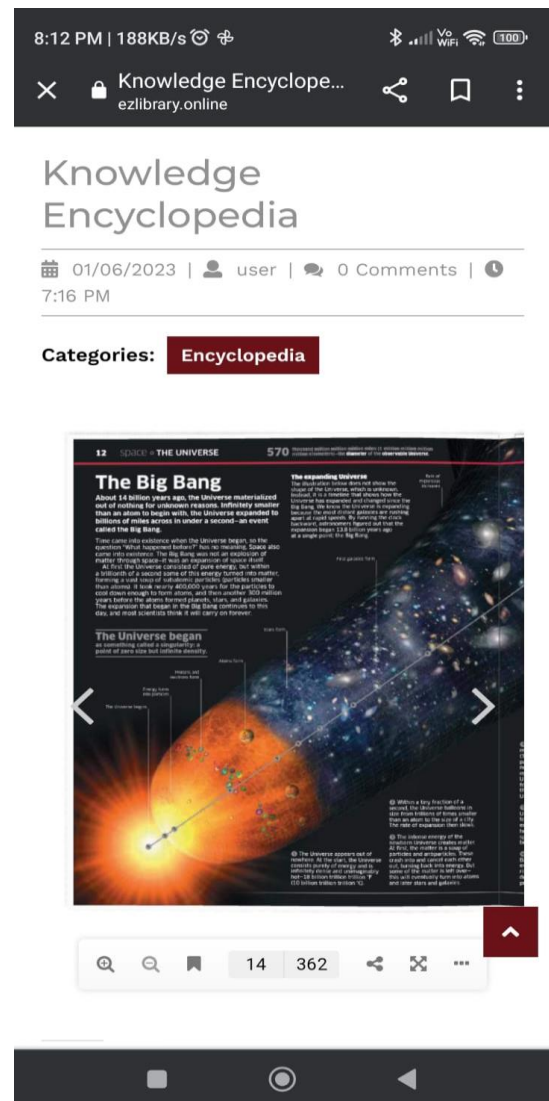
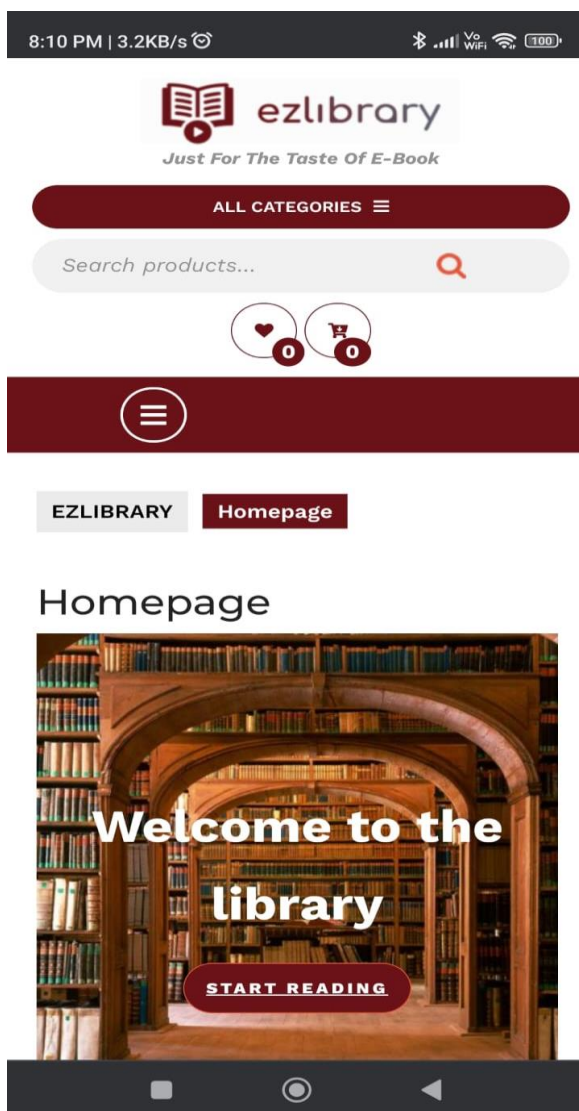


- The website also features 'Profile' page where users can view their account, update their passwords & delete their accounts.

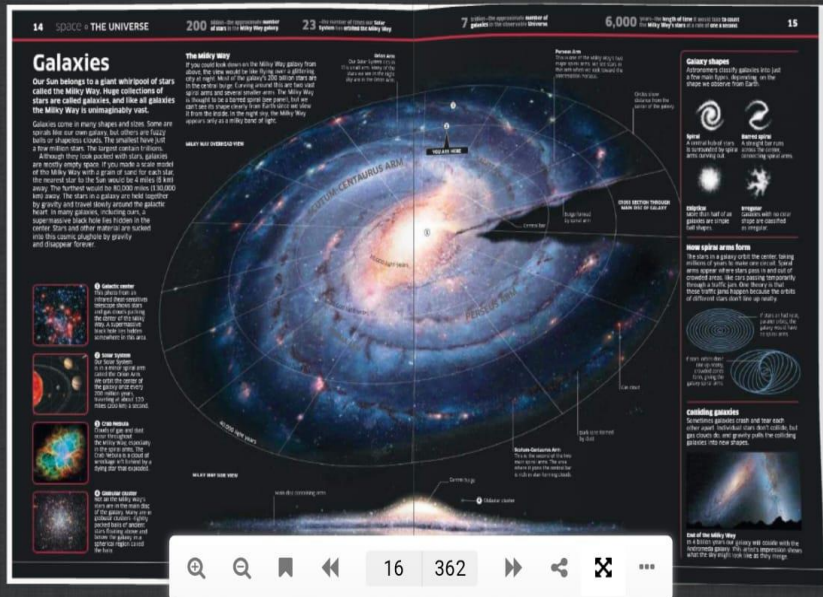




7. The website is mobile-friendly, so it runs on any phone with ease.







## Chapter 7

### Benefits:

EZlibrary.online offers several benefits to users, including:

- \* Convenient access to a wide selection of ebooks
- \* Personalized recommendations
- \* The ability to read and buy ebooks in one place
- \* A responsive and mobile-friendly design
- \* High availability and scalability through Azure load balancing
- \* Data protection and disaster recovery through Azure Recovery Services Vault



## Chapter 8

### **Conclusion:**

EZlibrary.online is an excellent ebook library website that provides a satisfying user experience. It allows users to conveniently browse and read a wide range of ebooks from different genres and categories, as well as get personalized recommendations based on their reading history and interests. Moreover, the website is designed and implemented with high availability and scalability in mind, ensuring that users can access the website anytime and anywhere without any downtime or performance issues. Therefore, EZlibrary.online is a valuable and trustworthy ebook library website that users can benefit from.