Preparation of Papers for An E-Governance Portal for Tax Payment

Rizwana unnisa, Bhanu k.N
Dept of MCA, Rajarajeshwari College of Engineering., Bangalore, India
Email: runnisa246@gmail.com, Bhnau.kn@gmail.com

ABSTRACT—Integration Solutions for collecting all the tax at the State level and Central Also the GST bill or Tax related to GST would be considered in this integration. This proposed system will solve most problems and bring transparency and add values to the collections of tax and it helps to find out the defaulters state wise.

Keywords – checklist, dispatcher, spot visit, tin, vat,

I. INTRODUCTION

The Spring framework began as one programmer’s need to solve a set of problems that Sun had tried to solve through edict in the Enterprise JavaBeans (EJB) Specification. At the time, companies were putting a lot of money and effort into developing web applications. The lack of established industry standards made management nervous, and development, haphazard. As mentioned in [1] and [2]. The J2EE specification promised scalability, security, high availability. Enterprise JavaBeans (EJB), as part of the J2EE suite of specifications from Sun, were intended to be as reusable and portable as their non-enterprise counterparts, plain JavaBeans.

As mentioned in [5] Spring provides a POJO (Plain Old Java Object) based configuration environment, a container to manage the instantiation and lifecycle of your POJO components and a framework to help you put into place some established best practices for your applications as mentioned in [3]. The idea behind Spring is that your code should be well-factored, and components kept pristine. Your components should run with or without a container, and be testable with minimal to no intrusion from outside classes. In essence, your components should have a life outside of the framework. And as complete entities into themselves, these truly modular components should have a loose affiliation with other components but should not be bogged down in these dependencies. Component factoring in this way has become central to object-oriented programming. As mentioned in [4] Hibernate is an Object-Relational Mapping (ORM) solution for JAVA. It is an open source project whose purpose is to make it easy to integrate relational data into Java programs. This is done through the use of XML mapping files, which associate Java classes with database tables. As mentioned in [7] Hibernate provides basic mapping capabilities. It also includes several other object/relational mapping (ORM) capabilities, including:

- An enhanced, object-based SQL variant for retrieving data, known as Hibernate Query Language (HQL).
- Automated processes to synchronize objects with their database equivalents.
- Built-in database connection pooling, including three open source variants.
- Transactional capabilities that can work both stand-alone or with existing Java Transaction API (JTA) implementations. As mentioned in [6] The goal of Hibernate is to allow object-oriented developers to incorporate persistence into their programs with a minimum of effort. It manages the Hibernate Session Factory as a singleton – a small but surprisingly annoying task that must be implemented manually when using Hibernate alone. – It offers a transaction system of its own, which is aspect oriented and thus configurable, either through Spring AOP or Java-5 annotations. Either of these are generally much easier than working with Hibernates transaction API.

Fig 1: ORM Hibernate

Fig 2: MVC architecture
II. SYSTEM ARCHITECTURE
This architecture will describe about the three layers of system which implements the business logic method which is helpful in Spring MVC controller. The first layer called as web service consists of controller package and Bean package which is used to create the UI. The second layer is called service layer where the request is mapped to database. The last layer is persistence layer which consists of DAO layer where class and interface are been implemented.

III. SYSTEM DESIGN
The aim of this portal is to provide complete information about the taxes of different states. There is some problems that need to be solved and bring transparency to the collections of tax. The above framework shows that dealers/applicant will apply for VAT or GST or TIN through online portal and get acknowledgment receipt along with documents submission. In the next level, the documents are verified by FWO/DEO officer and marked in checklist which is forwarded to tax inspector. Tax inspector conducts the spot visit and once inspection is conducted, AETC officer dispatches the memo tax conduction receipt to dealers.

1st International Conference on Innovations in Computing & Networking (ICICN16), CSE, RRCE
Use case in Fig. 6., explains the actors involved and scenario carried out in automation of this portal.

In this module admin will give approval notify to applicants and the remarks. Once the applicants get the approved acknowledgment their details will be removed from waiting List.

![Fig 7. DFD](image)

Data flow diagram in Fig. 7. Explains the various tasks carried by administrator to estimate the tax.

**IV. IMPLEMENTATION**

![Fig 8. Registration form](image)

In this module the applicants will get registered in the portal to get an acknowledgment from Deo/Fwo officer.

![Fig 9. Dashboard of Admin](image)

In this module, the applicants already registered and waiting to get their documents approved from administrator. This module fetches all the registered applicants in the dashboard and allows to get the approved.

![Fig 10. Approve Module](image)

**V. CONCLUSION**

The proposed tax integration portal can be used for collecting all kinds of taxes at the state and central level. Also, the GST bill or tax related to GST would be considered in this integration. This proposed system will solve most problems and bring transparency and add values to the collections of tax and it helps to find out the defaulters at the state wise. The aim of our portal is to provide complete information about the taxes of different states. There is some problem to be solved and bring transparency and add values to the collections of tax. The System is a way of disciplined approach towards any task, it's required in any field to have a systematic way of doing the work and preferably...
accepted all over the world. A web portal where Central Tax Board and State Tax collection authorities will have the single point where they can upload all the tax collected by state and central. central will have the overlook of the taxes collected by state authorities and give their share accordingly. All the taxes including the new bills would be part of this portal. In our portal, a strong care has been taken to meet the customers' need.

ACKNOWLEDGEMENTS
The authors of this paper are thankful to the Management, RRCE, Bangalore and Principal, RRCE, Bangalore for their continuous encouragement and support throughout the work.

REFERENCES

Websites:

Books:

Chapters in Books:
[1] Spring,WebMVC, Restful,Web Services and Spring Security,Chapter 2 – Spring Framework basics Chapter 3 - Configuring beans Chapter 4 - Dependency injection

Theses:

Biographies and Photographs

Rizwana Unnisa

Author Name: Rizwana Unnisa
Rizwana Unnisa is currently a student of Rajarajeswari College of Engineering in final year of Master of Computer Application. Her expertise is primarily in the domains of Wireless Sensor Networks. She obtained her BCA from BANGALORE UNIVERSITY in 2013.

Bhanu K.N.

Author Name: Bhanu K.N.
Bhanu K N is currently working as an HOD in the Department of Master of Computer Application. Her research and professional career spans for about 08 years of Teaching & research, 03 Years of Industrial Experience. Her expertise is primarily in the domains of Wireless Sensor Networks, sensor clouds, Adhoc Networks and Sensor Big data analytics.

She obtained her MCA from IGNOU, New Delhi, M. Phil in Computer Science from VMU, Salem and presently pursuing Ph. D from Rayalaseema University, AP. She is a life member in ISTE, IAENG, SVAK and CSTA. She has published 10 papers in refereed International Journals, national and International Conferences. She has guided around 50 MCA students and 10 M.Sc. (CS) and 02 M. Phil (CS) Students for their academic projects and around 06 students have presented papers in various conferences under her guidance.