



# International Journal of Innovative Research in Computer and Communication Engineering

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## Optimizing Discrete-Event Management Systems for Arranging Events

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**ABSTARCT:** This paper investigates the application of Supervisory Control of Discrete Event System (SCDES) to the management and control of a Custom Power Park (CPP). The heterogeneous nature of upcoming devices and equipment in CPP require advanced control methods to ensure the integrity and reliability under different operational states. A solution to achieve appropriate controllability, while avoiding complexity, is to sub-divide the control problem based on event-triggered dynamics where the occurrence of specific events could change the state of the system. This idea is employed to formulate the problem of coordination of the devices in a CPP and develop a systematic method to design a supervisory control based on the theory of SCDES. Three modular supervisors are synthesized using the TCT software and simulated using the Simulink. The proposed methodology could be applied to several control problems in micro grids.

**KEYWORD:** CPP: -Custom Power Park, SCDES: - Supervisory Control of Discrete Event System.

### I. INTRODUCTION

As per new technology discovered we are going to minimize man afford towards managing some kind of Events. It consists of various modules dealing with managing customer and employee information, managing events information, managing services, e-card creation and Event management website for status check. The first module of the project, Customer information deals with handling all the information regarding a customer and Employee information deals with handling all the information regarding an employee. The second module is concerned about managing events information. Third module manages the services associated with the events .Fourth module is e-card creation and the fifth one is customer check status through Event Management website. The database of customer information consists of information regarding a customer which includes personal information, and date of entering information. The database of employee information consists of information regarding an employee which includes personal information and its skills. The database of event information deals with information regarding event such as type of events, the type of package selected and the employee and customer associated with that event. Database covers large area of information related to event details. Customer check status website retrieves all database related to events from event details database.

### II. EXISTING SYSTEM

In the present scenario, existing system has many drawbacks which make it inefficient to carry on with it. The present working system of the referred company is manual. As we know taking record for such kind of event driven management for long term business is very difficult and quite time consuming so here we are going to introduced very efficient and quite simple software which leads to a very simple environment of event driven management. As far as quality is concerned it is ok but not as good when handled using computerized system. Now the inefficiency of the existing system can be stated in terms as follows:-The manually handled system is time consuming. Data security is not

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assured. It is difficult to maintain records in long run. Large number of manpower is required. It is hectic to handle huge transaction.

### III. PROPOSED SYSTEM

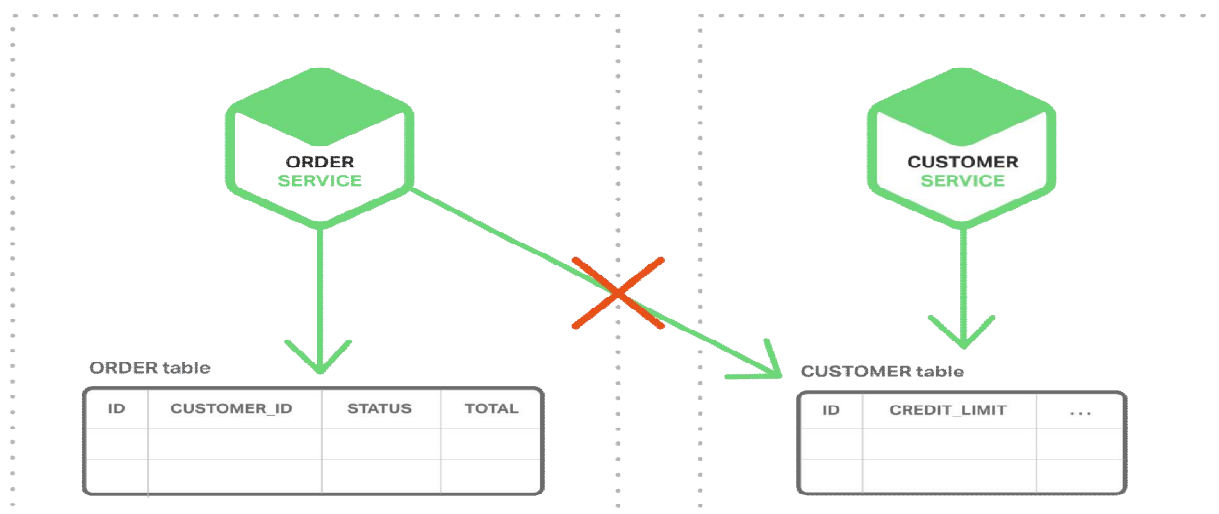
The proposed system is computerized and has been developed using advance language therefore it gives more facilities than present system. It provides quick access to any data. In this system user have to enter the data only once and then it get linked with all files. This reduces the workload of user and it is also a time saving process. The information about any event can be easily retrieved. The system maintains all records easy. The proposed system consists of packages such as Silver, Golden and Platinum, e-card distribution, DJ service and soon and updating the records at regular interval. Now a day's, the events such as festivals, wedding etc. have become a core part of life which has resulted in event planning and Management Company to rise. Day by Day increase in customer and their events laid a huge burden on event handler which is quite tough work. Managing various tasks and planning for employees, customer, location, transport and more. With the help of this technology, the distance between customer and management team has reduced with the Smart Web access.

### IV. WORKING OF THE SYSTEM

Here we use Angular JS as a front end developing tools which is open source and most secure one in recent era. And next we use NoSQL as a Db where we are going to store all query and records made by customer also it is capable to store updated data. In the administrator mode all the options of the system will be activated. Inserting, Updating and deletion of details will be done in this mode. The system provides various options like viewing, adding, updating, deleting and report generation for customer and employee details. After the administrator login, administrator can enter customer and employee details. He can manage events information and manage events services. The administrator enters all service information such as location, transport, decoration, catering and Dj. The customer then uses event id and customer id for checking status of events on event management website. The data is fetched from event information and event detail database of event management.

Here we are going to explain our execution:

1. As we seen below how customer will make an order as a service. Using database we can take their entry in to our DB for further management.



**Fig... no....01...Customer and Order Record list.**

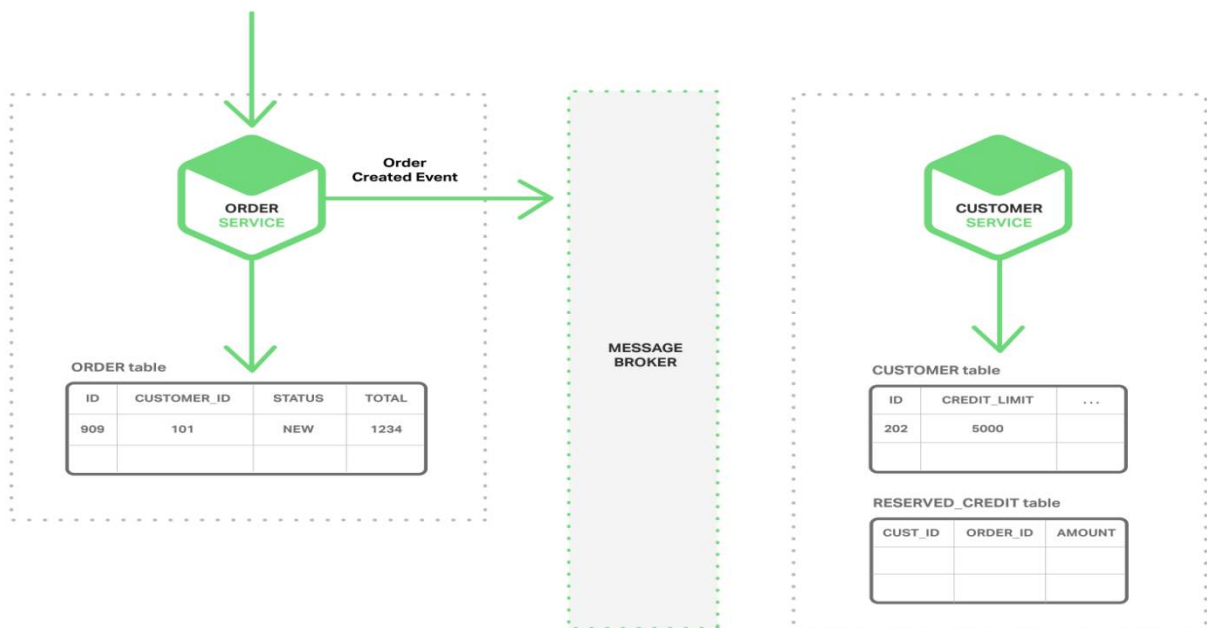
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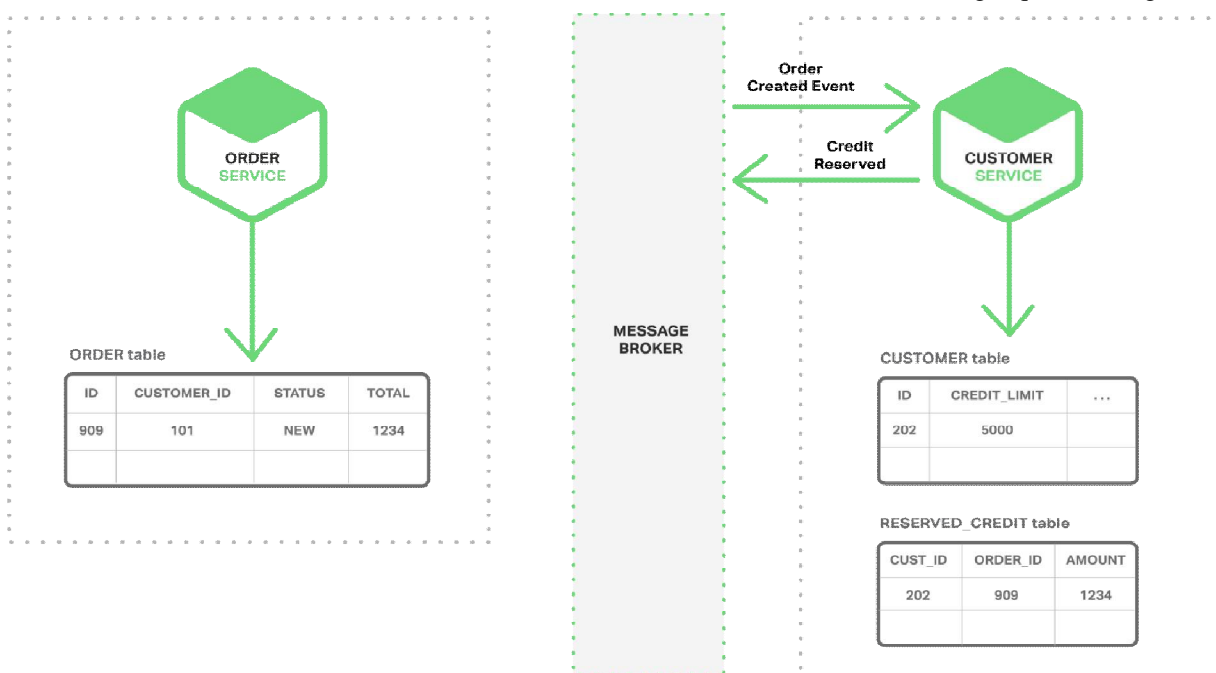
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- Here we are going to see how to add record when order is recorded once customer make any transaction regarding events. Here every customer directly interact with message broker which is just a medium through customer can make any order easily.



**Fig... no....02...Message Broker introduced as medium.**

- Here we see how the order created as event and how credit events reserved for making required arrangement.



**Fig... no....03...Event Created or Event Reserved.**

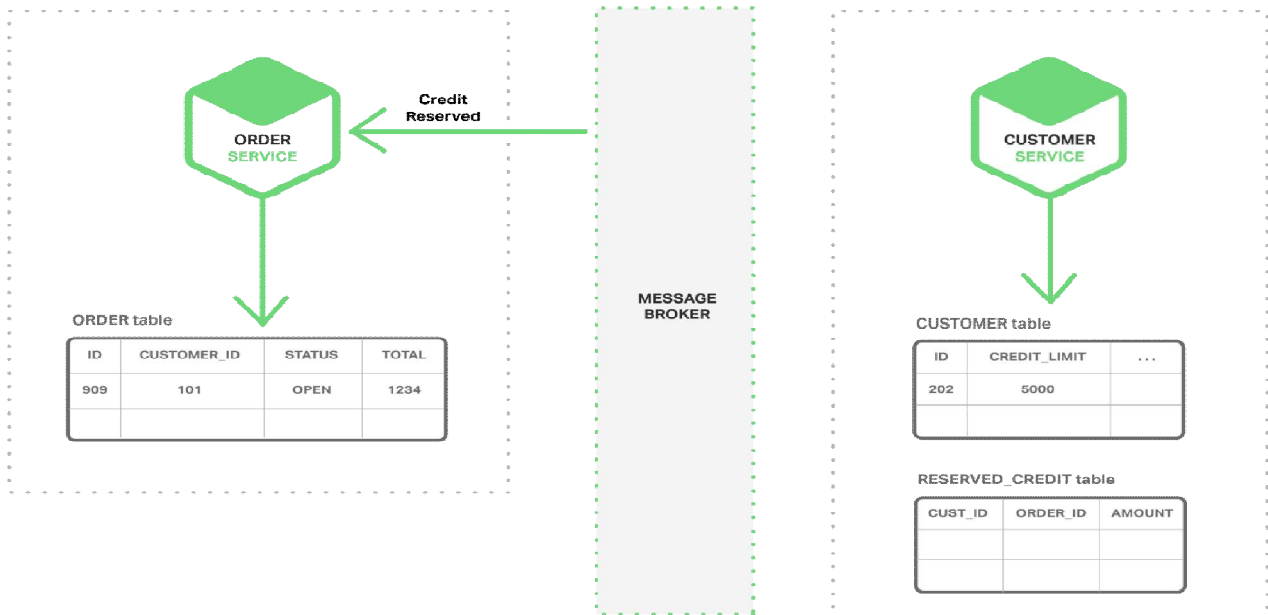
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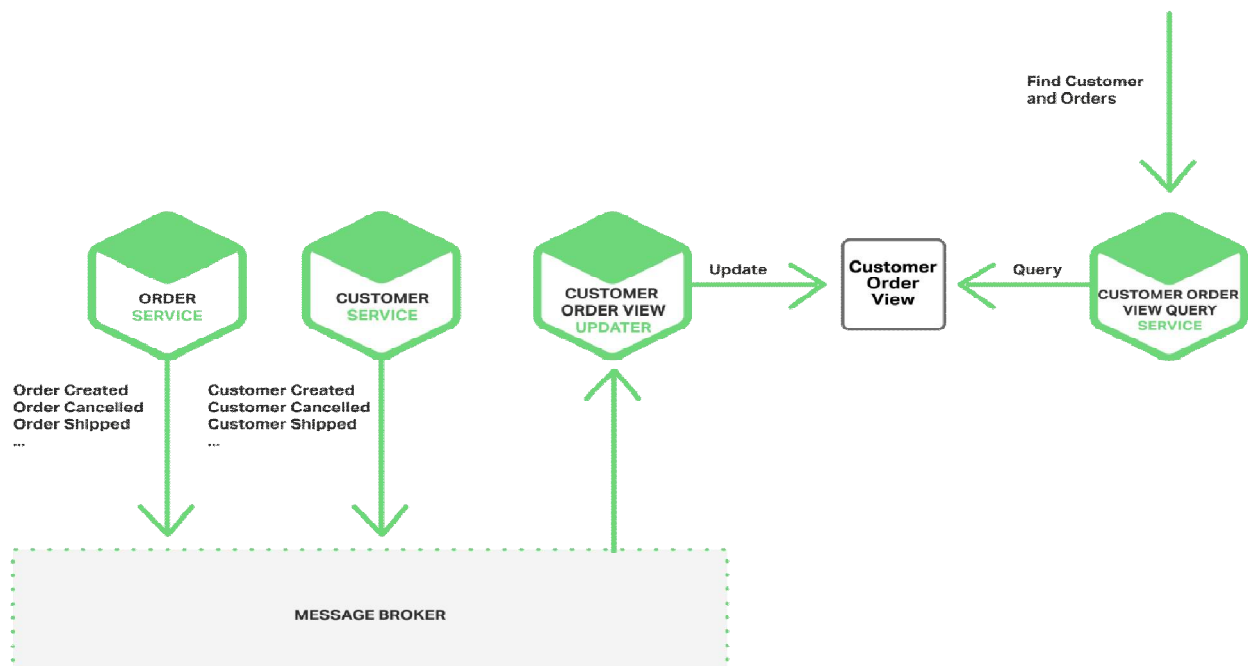
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4. Reverted message to customer about reservation is shown below:



**Fig... no....04...Message to customer about Event reserved.**

5. The overall scenario is created as per requesting order and arranging something for customer is performing using one touch menu as shown below:



**Fig... no....05...Described Menu of Customer & Order relation.**

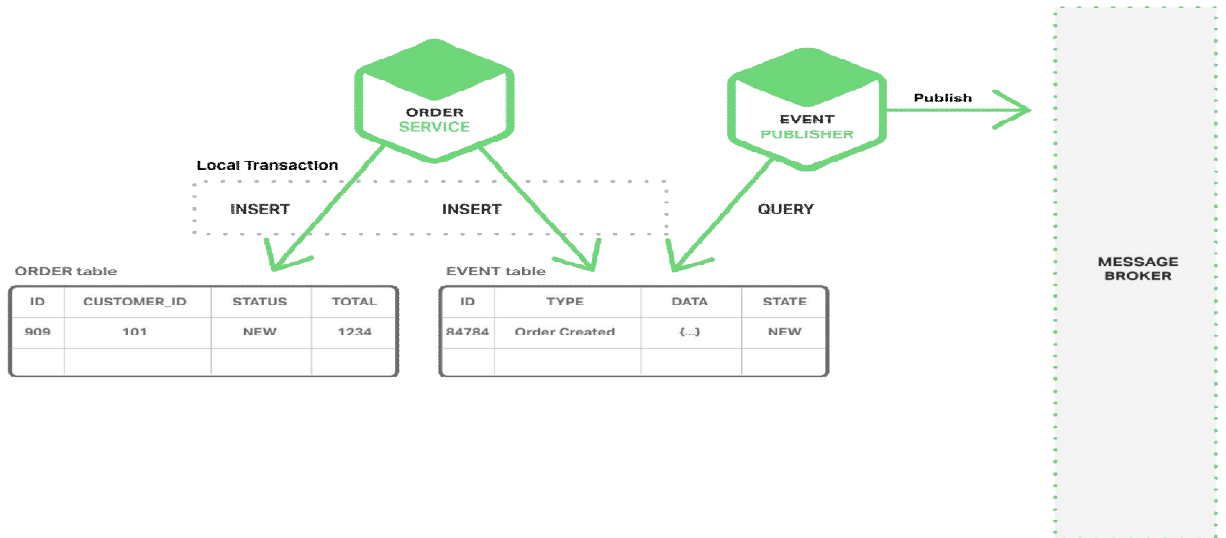
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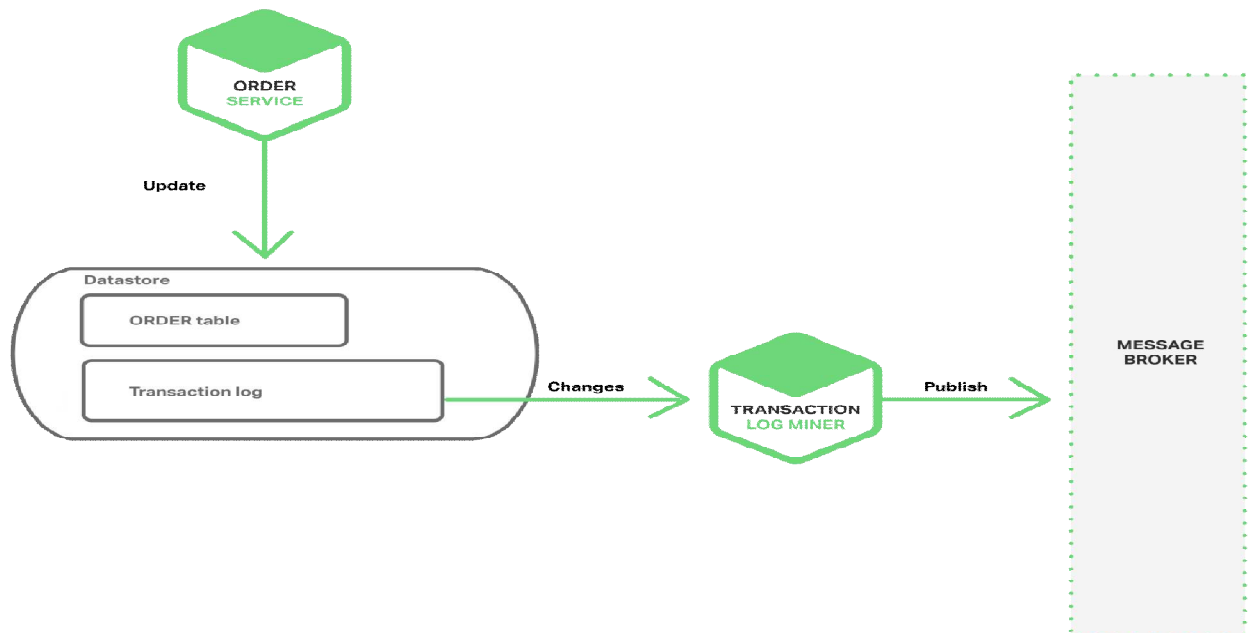
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6. Here we can see easily how our one touch event handling program is performing Event and Order side by side w/o mixing any event in to other one.



**Fig... no...06...Making Some Query Event.**

7. Here we can see easily how our system made some update when someone made something change in previous transaction using customer Id.



**Fig... no...07...Process how change previous transaction.**

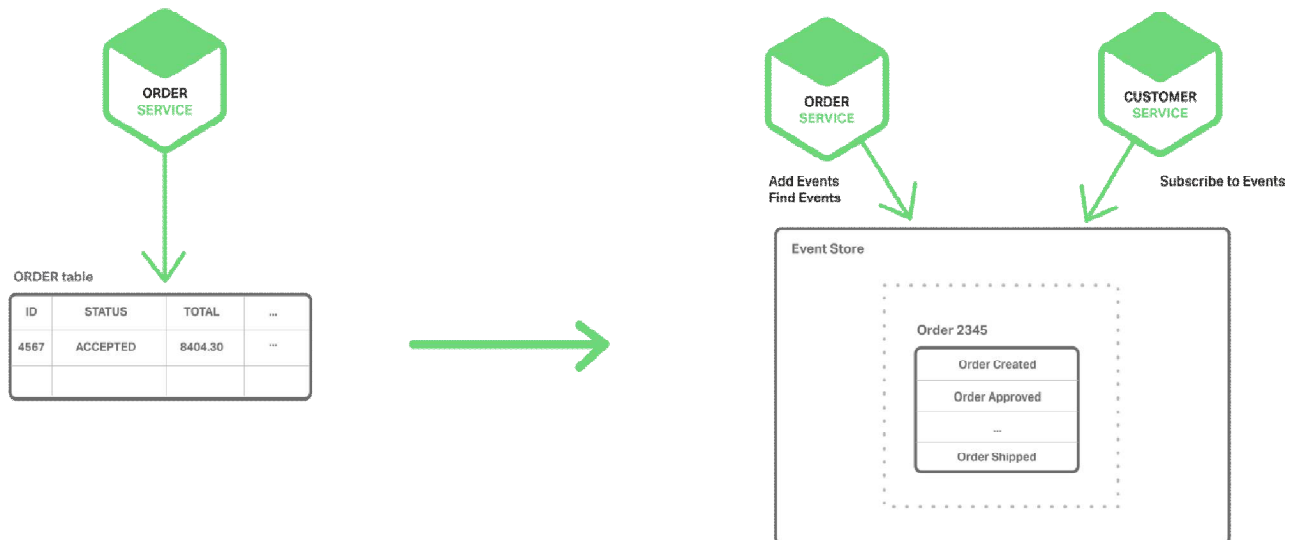
8. Final view how final arrangement will be made by us uses this program according to their registered dates and events.

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**Fig... no...08...Final view Of Event Credit.**

## V. MERITS & DEMERITS

1. This is an automated application where system automatically fetches the desired result from the database without any interaction from the administrator.
2. It has a simple interface, it has predefined format for searching, if user types the searching information in a wrong format for better understanding. It also provides high level security through SQL using secure authentication. Cost transaction can be easily maintained.
3. It is not suitable for mobile and any other handheld device. It has limited number of module.

## VI. CONCLUSION

As we seen in our program the whole concept is around microservices architecture using cloud services for distributed data centric connection which provides us very efficient and very secure server for making such kind transaction. We use NoSQL as a DB which is used to stored off line data for further process and also making huge collection of data for making a big business related event and event driven management.

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