

# SECURITY CHECKING FORM

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## ARTICLE INFO

Keywords:

## ABSTRACT

Abstract of the work

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## 1. Introduction

The primary objective of our project is to solving security and student problems related to outing. This topic provides information about the Indian Institute of Information Technology (IIIT) , Dharwad. These project tell about Security Checkup. In these project contains many parts like Registering for Outing, Updating of outing form, Staff Details, Student Details, Previous Year Student Details, Normal Outing Student, Change Password buttons are these . Each will tell about different data.

The prime contributions of this work are:

- **Registering for Outing** Easily create and submit outing forms, providing essential details such as date, time, rollno, phone number, Email, Department name, room number and type of outing.
- **Updating of Outing Form** Modify and update outing forms as necessary, ensuring that all information remains current and accurate .  
There is a option that contains a auto generating email to students who are not come to college.
- **Staff Details** In these ,It will the shows the staff such as faculty details with room numbers, name ,phone number and Email.
- **Student Details** In these it will contains the student basic details such roll number, name, date of birth, department , blood group.
- **Previous Year Student Details** Maintain records of previous year students who have paced in into different companys.
- **Normal Outing Student** In these it will shows about which students are out of the campus at these time.
- **Change Password** Ensure security and data integrity with the ability for users to change their passwords regularly.

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ORCID(s):

## 2. Literature Review

Literature of the work / related work

? proposed an evaluation of a UAV for monitoring the course of iron deficiency chlorosis in soybeans and predicting yield. ? proposed rice nutrition deficiency-based UAV images, the authors employed the Gaussian process and mRMR technique to extract and combine the features, another research utilized (?) the Visible Near-Infrared spectroscopy to detect the nutrition deficiency in Potato plant.

## 3. Proposed Method

Agile Method: Initially we find the problem, then we started the project when we are on the process, then we came to know student faces so many other problems. To solve this method we found a new strategies to this method to solve their problems, at every stage we are modified the project to make it more efficiently to solve student problems, this results in agile method. **1. Project Planning and Requirement Gathering:**

- Begin by establishing project objectives and gathering detailed requirements of faculty, staff, and students.
- Conduct interviews to identify key features and functionalities of the Security CheckUp System, as outlined in the project description.
- Prioritize requirements based on their importance and feasibility, ensuring alignment with the project's primary objective of solving security and student-related problems associated with outings.

### 2. Iterative Development Cycles:

- Adopt an iterative development approach, breaking down the project into manageable increments .
- Each iteration focuses on implementing a subset of features, starting with core functionalities such as registering for outings and updating outing forms.
- Conduct regular review meetings with students to gather feedback and make necessary adjustments to the system requirements and design.

### 3. Feature Implementation:

- Develop each feature iteratively, following the principles of modular and incremental development.
- Begin with basic functionalities, such as user authentication and form submission, before moving on to more complex features like staff and student details retrieval.
- Ensure frequent integration and testing of newly developed features to identify and address issues early in the development process.

### 4. Continuous Testing and Quality Assurance:

- Implement a testing strategy to validate the functionality, usability, and security of the Security Checkup System.
- Conduct both manual and automated testing to identify and rectify defects promptly.
- Utilize user students to involve in validating the system against their requirements and expectations.

### 5. Feedback :

- Continuous improvement by feedback from students at each iteration.
- Prioritize feedback based on its impact on the project's objectives and address critical issues promptly.
- Iterate on the system design and implementation based on lessons learned from user feedback and testing results.

## 6. Deployment and Maintenance:

- Monitor system performance and user satisfaction post-deployment, addressing any issues or concerns as they arise.
- Establish a maintenance plan to ensure the ongoing support and enhancement of the system, including regular updates and bug fixes.

## 4. Experimental Analysis

First when we visit this website, It will display some options to choose which you want on the basis of your requirements:



### 1.Outing Form:

The outing form is a simple process to request permission to leave campus or a specific area. You'll need to fill in basic information like your Roll Number, Name, Department, Phone Number, Room Number, Out Time and Date, Type of Outing, and Email ID. After you've entered these details, click the submit button to send your request. If everything is filled out correctly, the system will save your information and confirm that your request has been submitted successfully. If there are errors or missing fields, you'll be asked to correct them before proceeding.

**OUTING FORM**


Registration Number: \_\_\_\_\_

Name: \_\_\_\_\_

Department Name: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Room Number: \_\_\_\_\_

Out Time and Date:   
 dd-mm-yyyy --:-- 

Type of Outing:   
 Home ▼

Email ID: \_\_\_\_\_

Create Register Form

## 2.Security updation of outing form:

The "Security Updation of Outing Form" is a specialized feature designed for campus security personnel. Access to this option requires a secure password to ensure only authorized personnel can use it. When a student returns to the campus, security needs to enter their Registration Number and the exact In Time. This step is critical for tracking who has returned and who has not.

If a student fails to return by 10:00 pm, there's an option for security to send an email alert to the student's registered email address, notifying them of the missed curfew. This feature is intended for "Normal Outing Students" who are expected to return by a specific time.

When security personnel click the "Submit" button, it registers the In Time for the student associated with the given Registration Number. This way, the system keeps a record of student movements, ensuring campus safety and accountability.



### **3.Staff Details:**

The "Staff Details" option provides key information about the campus staff or faculty. When you select this option, you'll see a list of staff members with details like their Name, Cabin Number, Phone Number, and Email ID. This feature is particularly useful when you need to contact a staff member, arrange a meeting, or find their office on campus.

With the "Staff Details" option, you can quickly get in touch with faculty for academic or administrative purposes. It serves as a convenient directory for students and other staff to locate and communicate with faculty members. .

### Staff List

Name	Cabin No	Phone No	Email ID
Dr. Sunil C K	1	123456789	sunick@iitdwd.ac.in
Dr. Aswath Babu H	2	8970994786	aswath@iitdwd.ac.in
Dr. Prabhu Prasad B M	3	900862681	prabhuprasad@iitdwd.ac.in
Dr. Rajesh N S	4	9916043766	rajesh.ns29@iitdwd.ac.in
Dr. Jagadish D N	5	9886668004	jagadishdn@iitdwd.ac.in
Dr. Anushree Kini	6	8762234173	anushree@iitdwd.ac.in
Dr. ANAND P. BARANGI	7	9590789602	anandbarangi@iitdwd.ac.in
Dr. Pavan Kumar C	8	9789714476	pavan@iitdwd.ac.in
Dr. Malay Kumar	9	8959598477	malay.kumar@iitdwd.ac.in

## 4. Student Details:

The "Student Details" option allows you to retrieve specific information about a student. To access this section, you need to enter a valid Registration Number and Password. This security measure ensures that only authorized users can view the student's information.

Once logged in, you can obtain details like the student's Name, Department, Year of Study, Contact Information, and other relevant academic or personal data. This option is typically used by administrators, faculty, or authorized personnel to gather necessary details about a student for academic or administrative purposes. It serves as a secure and efficient way to access student information in a campus environment.

The image shows a login interface on a dark background. It features a blue rectangular box containing two input fields and a button. The first field is labeled 'Registration Number:' and the second is labeled 'Password:'. The password field contains a series of dots. Below the fields is a blue button with the text 'Get Student Details'.

Student Details								
Registration Numbers	Name	Date Of Birth	Department	Blood Group	Gender	Phone Number	Parent Name	Parent Phone Number
22bcs016	A RAKESH	28/10/2004	CSE	O+	M	1472583695	A MANOG	1234569870

## 5. Previous Year Students:

The "Previous Year Students" option provides a way to connect with students who graduated or were placed in jobs in the previous year. When you select this option, you'll find information about these alumni, including their names, contact details, the companies they joined, and their job roles. This feature is especially valuable for current students who want to network with alumni, seek career advice, or learn about potential job opportunities.

By using this option, students can establish connections with those who have recently gone through the job placement process, gaining insights into their experiences and getting tips on how to navigate the job market. This resource can help bridge the gap between current students and alumni, fostering a supportive community and creating valuable networking opportunities. It also serves as a way for colleges to maintain relationships with their alumni

and showcase the success stories of their graduates.

Placed List			
Name	Phone No	Email ID	Company Name
Arpenaoyina Rakesh	9502505988	123@gmail.com	Google
Chidari Sai Krishna	9501234567	122@gmail.com	Amazon
Azmeera Sai	9501234567	122@gmail.com	Microsoft
Bhargav	9059041681	123@gmail.com	Apple

## **6.Normal Outing Students:**

The "Normal Outing Students" option helps campus security monitor students who have left the campus but haven't returned. This feature is designed to track students with normal outing permissions, allowing security personnel to quickly identify those who haven't revisited the campus by a specific time, such as a nightly curfew.

When security selects this option, they can view a list of students who are expected to return but are still absent. This allows security to take appropriate actions, like sending alerts, contacting the students, or notifying campus authorities if needed. This feature is crucial for maintaining campus safety and ensuring that students are accounted for, particularly when there's a strict policy regarding campus outings and curfews. By using the "Normal Outing Students" option, security can effectively manage student movements and respond quickly to potential concerns.

Student List			
Name	Registration No	Phone No	Room No

## **7.Change your Password:**

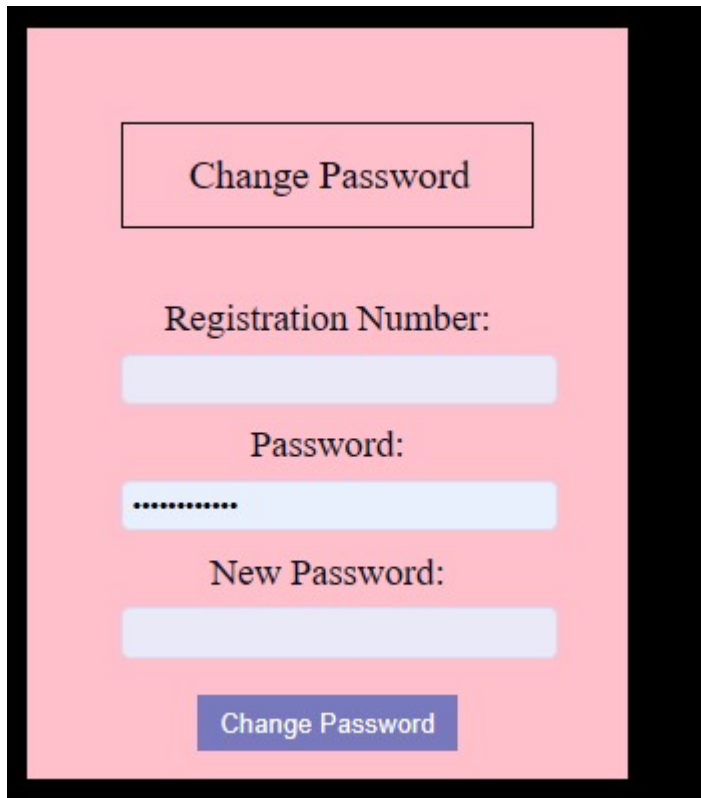
The "Change Your Password" option allows students to update their account security. After



logging in to access the "Student Details" section using their current password, students can use this feature to change their password to something new.

This feature is designed to help students maintain the security of their accounts by allowing them to reset their passwords, especially if they suspect unauthorized access or simply want to enhance their account security. When selecting this option, students will typically be prompted to enter their current password, then choose and confirm a new password. This process helps ensure that only the authorized user can change the password.

By providing the "Change Your Password" feature, the system supports best practices for account security and allows students to keep their personal and academic information safe. It's an important tool for maintaining privacy and preventing unauthorized access to sensitive student data.



## 5. Results and Analysis

- This feature streamlines the process for students to request outings, improving efficiency and accountability.
- This feature enhances campus security by tracking student movements and ensuring timely responses to any deviations from expected schedules.
- This feature facilitates communication between students and staff, improving accessibility and administrative efficiency.

- This feature ensures data privacy and security while providing necessary student information for academic or administrative purposes.
- This feature fosters a sense of community and provides valuable networking opportunities for current students.
- This feature ensures student accountability and enhances campus safety by tracking student movements.
- This feature promotes account security best practices, ensuring that students can protect their personal information effectively.

## **6. Conclusions and Future Work**

Our Future work mainly corresponds to Staff Biometric system, Student Results and many more.

### **1. Expanded Project Planning and Requirement Gathering:**

- Extend the initial project planning phase to incorporate future enhancements such as faculty biometric, student biometric, student results integration, student query block, information about the college, and placement details block.

### **2. Iterative Development and Prioritization:**

- Integrate the development of new features into the existing iterative development cycles, prioritizing based on their impact on security, student welfare, and overall system usability.
- Begin with foundational features such as faculty biometric authentication and student query lock functionality before progressing to more complex enhancements like student biometric integration and excursion management.

### **3. Feature Implementation and Integration:**

- Implement new features iteratively, ensuring integration with the existing Outing Management System.
- Develop biometric authentication modules for faculty and students, incorporating advanced security measures to safeguard sensitive data.
- Integrate student results management functionality to enable efficient tracking and analysis of academic performance within the system.

### **4. Continuous Testing and Quality Assurance:**

- Extend the testing framework to validate the functionality, reliability, and security of the newly added features.
- Conduct rigorous testing of biometric authentication systems to ensure accuracy and reliability in real-world scenarios.
- Verify the integrity and confidentiality of student result data through comprehensive testing and validation procedures.

## 5. Feedback Incorporation and Refinement:

- Solicit feedback from students on the usability, effectiveness, and performance of the newly implemented features.
- Prioritize feedback related to user experience, system performance, and adherence to security standards.
- Iterate on the design and implementation of features based on feedback and testing results, striving for continuous improvement.

## 6. Deployment and Maintenance:

- Plan for the phased deployment of new features, starting with a to validate functionality and gather user feedback..
- Ensure ongoing support and enhancement of the system, including updates to accommodate evolving user needs and technological advancements.

## Conflicts of Interest

Conflicts of interest may arise within the presented data due to various factors. For instance, the emphasis on campus security features might be influenced by the institution's desire to mitigate liability risks or project an image of safety, potentially overshadowing other priorities. Additionally, the provision of alumni networking options could serve the university's interest in bolstering its reputation and attracting future students, potentially overshadowing the needs of current students or alumni. Moreover, the access to student information by authorized personnel may raise concerns about privacy breaches or misuse of data for institutional gain. Addressing these conflicts requires transparency, ethical considerations, and student involvement to ensure equitable outcomes.

## Competing Interest

The provided data, while informative, may be subject to competing interests. For instance, the emphasis on campus security features could reflect a priority placed on maintaining safety protocols, potentially due to past incidents or concerns about liability. Similarly, the inclusion of alumni networking options may serve the university's interest in fostering a positive reputation and attracting prospective students. Additionally, the requirement for student information access by authorized personnel could reflect administrative needs but may also raise concerns about privacy and data protection. Balancing these interests ensures that the system effectively serves both the institution and its students while upholding ethical standards and legal compliance.