UNIVERSITI TEKNOLOGI MARA
Cawangan Pulau Pinang
Kampus Permatang Pauh
Kampus Bertam

Our Ref : 500-UiTMPP(PSKK.19/2021)
Date : 23 July 2021

Dr. Jiju A. Mathew
Dean - Planning and Communication & Head
Department of Computer Science
St. Thomas College, (Autonomous) Thrissur
Kerala, India

Dear Dr. Jiju,

RE: APPOINTMENT LETTER AS CONSULTANT TO ORGANISE AND CONDUCT THE E-ELECTION FOR PSSK 2021

We hereby with reference to the discussion between Persatuan Sukan dan Kebajikan Kakitangan (PSKK) Universiti Teknologi MARA(UiTM) very pleased to appoint you as our E-Election Consultant to set up and conduct our E-Election or our online-election for appointing our new Committee Members (Jawatankuasa Persatuan PSKK) during our upcoming Annual General Election(AGM) 2021, which is fixed for 5the August 2021.

2. The Terms and conditions of appointment are as follows:

i. The expected date of commencement from 1st August to 5th August 2021
ii. To prepare Programming and relevant architect for conducting the election online
iii. To Design and Setting the User Interface for casting the votes online
iv. To complete the system setting according to the timeframe agreed
v. To prepare the User Guide Animator for user guide
vi. Honorarium – Consultant fees fixed at USD180.00
vii. To prepare the Final Result with complete Report for Auditing purposes
viii. Ensure at all times the data and information shared kept Private and Confidential

3. In the meantime, on behalf of PSSK would like to thank you for your kind acceptance, and readiness to accept this proposal and working relationships.

Yours Sincerely,

MOHD SAIFULNIZAM ABU BAKAR
Chairman

Fireflies

Department of Computer Science

St.Thomas College, (Autonomous) Thrissur, Kerala, India

20 July 2021

To,

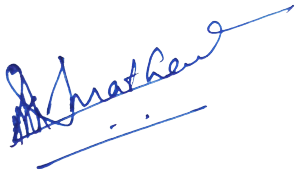
Mr. Mohd Saifulnizam Abu Bakar,
Chairman - PSKK,
University Teknologi MARA,
Malaysia.

Sub: **Consultant - e-Election PSKK 2021** - Regd.

Dear Mr. Mohd Saifulnizam,

This letter is in response to the discussion we had on 18 July 2021 regarding the conduct of the staff elections of University Technology MARA, (UiTM), Malaysia. I am glad to accept the offer and our team will endure our best to deliver an efficient, simple, reliable & cost-effective software, according to the conditions conveyed during the discussion. For your kind information, this product will be developed by Fireflies - the software development team from the Department of Computer Science, St. Thomas College (Autonomous), Thrissur, Kerala, India.

Yours truly,



Dr, Jiju A. Mathew
Dean - Planning and Communication &
Head - Department of Computer Science,
St. Thomas College (Autonomous), Thrissur, Kerala, India.
Phone: +91 - 94961 28082
Email: jijuamathew@stthomas.ac.in

Fireflies

Department of Computer Science

St.Thomas College, (Autonomous) Thrissur, Kerala, India

Invoice No.: FF/CS-STC/UiTM/03/2021

Bill To: Mr. Pengerusi, UiTMPP PSKK.

Item	Rate (USD) / Hr	Hours	Amount (USD)
Honorarium - Consultant	15.25	10	152.5
		Tax (18%)	27.5
		Total (USD)	**180.00**

Please transfer the amount to:

Account Name : ST THOMAS COLLEGE

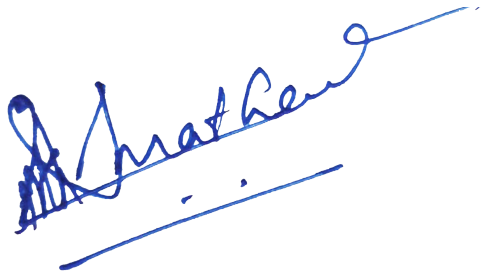
Account No. : 12720200007689

Account Type : Current A/c

IFSC Code : FDRL0001272

MICR Code : 680049004

Swift Code : FDRLINBBIBD



Consultant - UiTMPP Election 2021
Dr. Jiju A. Mathew
Dean - Planning and Communication &
Head - Department of Computer Science,
St. Thomas College (Autonomous),
Thrissur, Kerala, India.

Note: This invoice excludes hours worked by Team Fireflies, St.Thomas College (Autonomous), Thrissur, Kerala, India for UiTMPP PSK Election, August 2021

PEMILIHAN JAWATANKUASA PERSATUAN SUKAN DAN KEBAJIKAN KAKITANGAN (PSKK) UiTM CAWANGAN PULAU PINANG SESSI 2021/2023

UiTMPP PSKK Election - 2021

Introduction

Fair elections are essential for sustainable growth of any organisation. It is important as it sets a standard by which every employee is governed - a standard which promotes social stability from within. Another dimension to it is that it provides a channel with which the stakeholders of that organisation can elaborate their broad objectives thus helping it grow further.

Many uncertainties and questions aired whenever the very thought of conducting the election popped up. Questions like “Can elections be held safely without further spreading of the virus?” and “Will incumbents abuse the difficulty of holding elections to extend their mandates?” were asked by the common man; because of which many scheduled elections were postponed. Since the outbreak of the pandemic, at least 78 countries and in-numerous organisations across the globe have decided to postpone elections. Authorities at UiTM were

no different. They kept postponing the elections until they realised that the COVID is going to stay here, at least for couple of years. This is when a clear trend change from postponing towards holding elections came to their thought process. But with the pandemic, the normal mode of election would have invited adverse effects and hence the mode change was proposed — to conduct the election the Online Way. The administration realised that Online Voting System, if conceived properly, is a secured tool that allow its members to cast their vote and allow the administration to publicise the results, in real time. At the core, it must protect the integrity of ones vote by preventing voters from being able to vote multiple times. Further, as a digital platform, it eliminated the need to gather in-person, cast votes using paper, or by any other means. Trust was another aspect to look for. To have a free and fair election, the authorities decided to appoint an international consultant and three internal observers.

The project **UiTMPP PSKK ELECTION - 2021** is an online election platform developed exclusively for the conduct of staff elections of **University Technology MARA, (UiTM), Malaysia.** Having said that it can act as a web-based election platform for conducting online elections in any organisation, ranging from educational institutions to businesses establishments. This application simplifies the election procedure and is fast, reliable and convenient. The major advantage of this product is that it can be customised easily to conduct elections within an organisation. This is a cost-effective mechanism that saves effort and time required to set up a manual election and it requires minimal resources for functioning. This software is developed by **Fireflies** - software development team comprising the students, alumni and faculty members of the Department of Computer Science, St. Thomas College (Autonomous), Thrissur, Kerala, India.

List of Candidates

The six electoral positions and the candidates competing for these posts are:

I. Pengerusi (Chairman - 1 Person)

AHMAD ASRI BIN ABD SAMAT

MOHD SAMSUDIN BIN ABDUL HAMID

II. Timbalan Pengerusi (Vice Chairman - 1 Person)

MOHD SAIFUL EFFENDY BIN MOHD SHUKERI

MOHD SAMSUDIN BIN ABDUL HAMID

III. Setiausaha (Secretary - 1 Person) - NO VOTING

MASRUL FARIHAN BINTI MOHAMAD

IV. Bendahari (Treasurer - 1 Person) – NO VOTING

LESAIRUAMIN BIN LEIAHS

V. Penolong Setiausaha (Assistant Secretary - 1 Person) – NO VOTING

MOHD SAIFUL EFFENDY BIN MOHD SHUKERI

VI. Ahli Jawatankuasa (Committee Members - 5 nos.)

AHMAD KHUZAIRI OMAR BAKHI

AMIR SHAHRUL BIN ISHAK

ANGAYAR KANNI RAMAIAH

HAZWAN BIN HASSAN

MUHAMAD FARID BIN HJ SHUIB

MUHAMAD RASHID BIN MUHAMAD YATIM

MUHAMAD KHUZAIMIE BIN AZUDDIN

NORHAFIDZAH BINTI MAHDZIR

SHAHIRAH BINTI KHAIRUDIN

WAN HASZAINA BINTI WAN ISMAIL

Domain

The web application was hosted at **www.uitm.site.** A total of 17 candidates contested for the possible six positions and 182 voters were eligible to cast their vote.

Observers & Election Consultant:

Election observation is a valuable tool for improving the quality of elections. They help build confidence in the honesty of electoral processes. It can deter manipulation and fraud, or expose such problems if they occur. For fair election, **UiTMPP PSKK ELECTION - 2021** deployed three observers in addition to the Election Consultant Dr. Jiju A. Mathew, Dean - Planning and Communication, St. Thomas College (Autonomous),Thrissur, Kerala, India. Details of the consultant and the observers along with their official mail id are listed below.

Consultant:

Dr. Jiju A. Mathew - Dean - Planning and Communication &
Head, Department of Computer Science,
St. Thomas College (Autonomous), Thrissur, Kerala, India.
jijuamathew@stthomas.ac.in

Observers:

1. MUHAMMAD FIKRI RAMLI, muhammadfikri@uitm.edu.my
2. JAMAL OTHMAN, jamalothman@uitm.edu.myhe
3. ZAMRI ABD KAHAR, zamri882@uitm.edu.my

Fireflies - Software Development Team

System Architect:

Mr. Abhinand Gokhala - Alumnus, Department of Computer Science,
St. Thomas College (Autonomous), Thrissur

Team Lead:

Mr. Asish Sajeev - Alumnus, Department of Computer Science,
St. Thomas College (Autonomous), Thrissur

Team members:

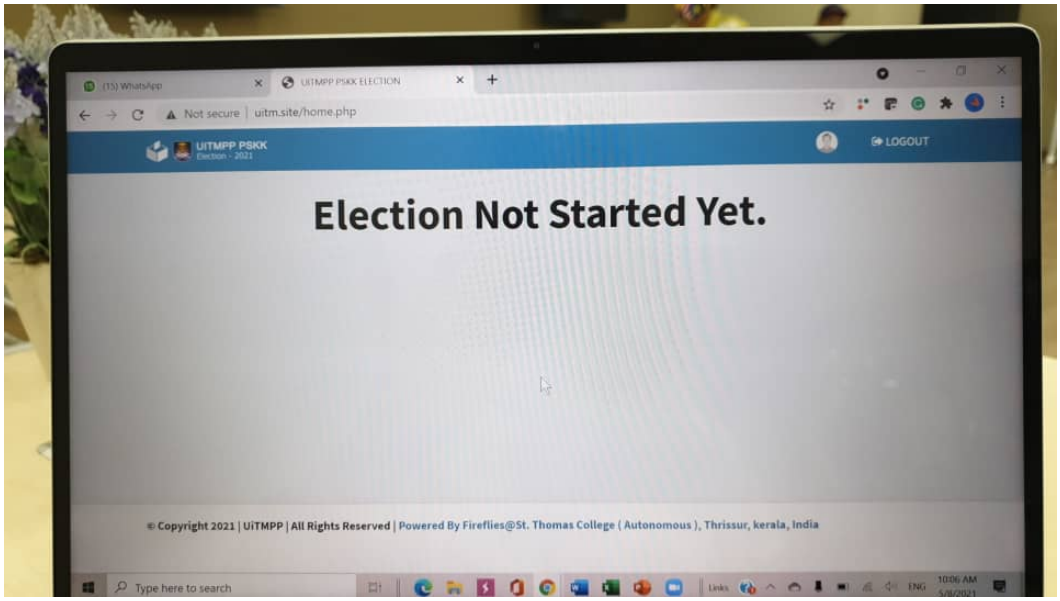
Ms. Lakshmi P. - Final Year Post Graduate Student,
St. Thomas College (Autonomous), Thrissur

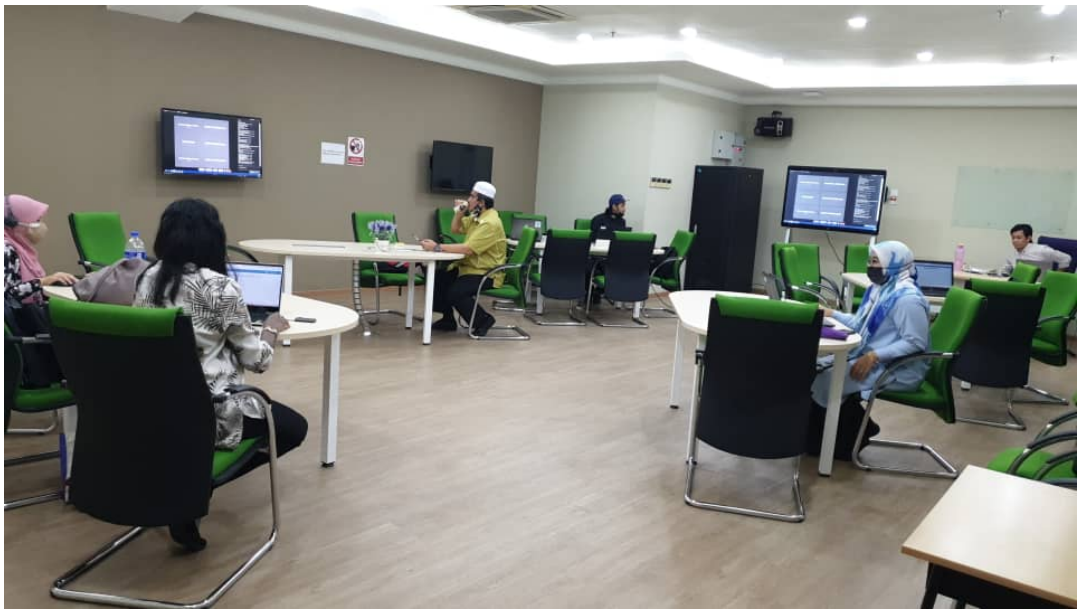
Ms. Angaliya Vincent - Final Year Post Graduate Student,
Department of Computer Science,
St. Thomas College (Autonomous), Thrissur

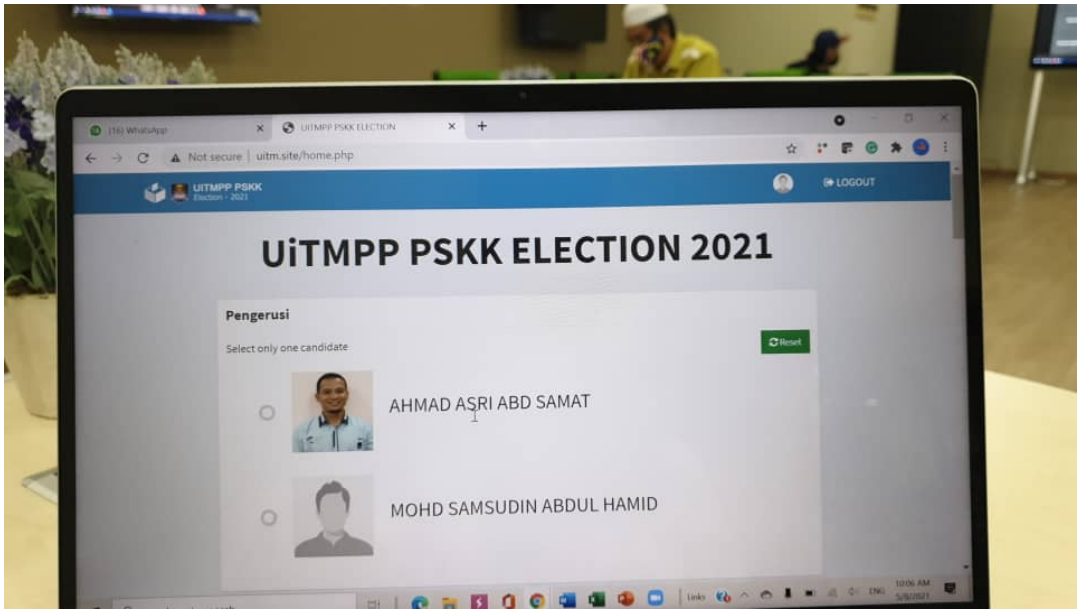
Mr. R. Venujan - Final Year Graduate Student,
Department of Computer Science,
St. Thomas College (Autonomous), Thrissur

Mr. Devadas K. H. - Final Year Graduate Student,
Department of Computer Science,
St. Thomas College (Autonomous), Thrissur

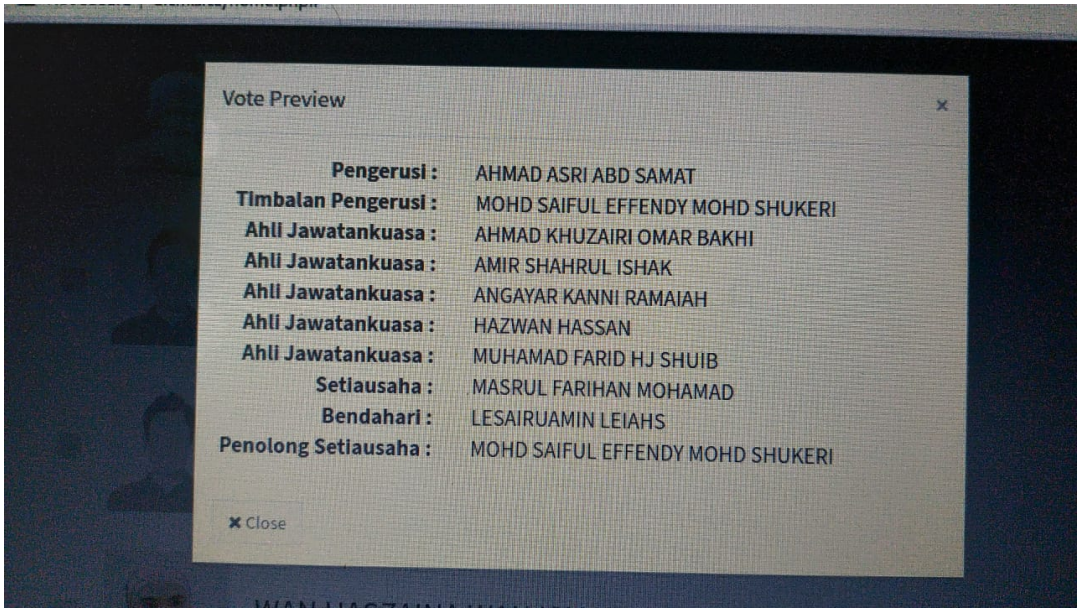
Capturing the Election on 5 August 2021:



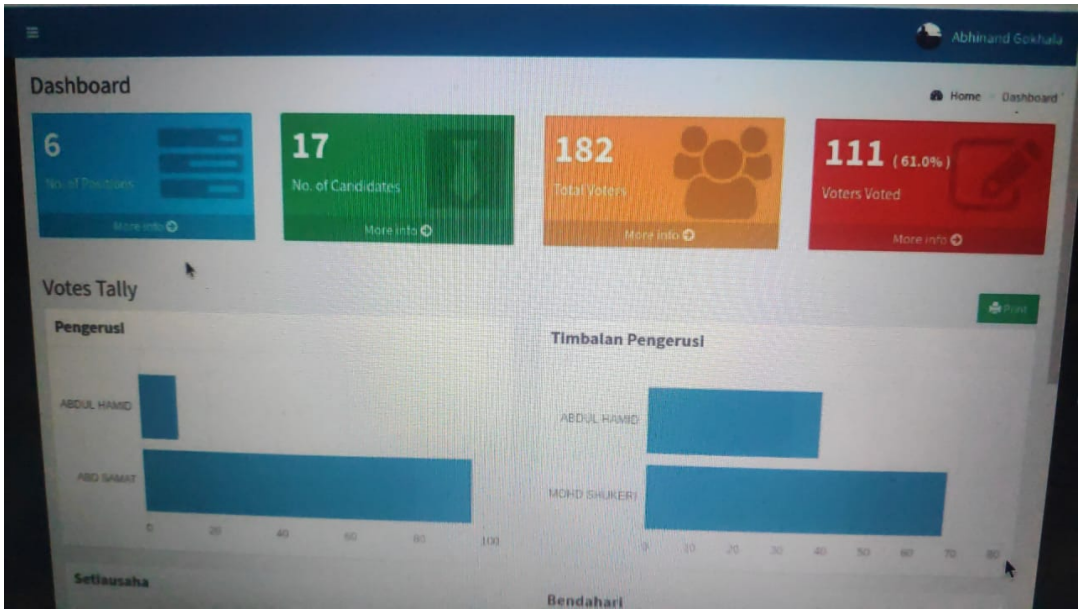



UiTMPP PSKK ELECTION
Not secure | uitm.site/home.php
UiTMPP PSKK
LOGOUT
UiTMPP PSKK ELECTION 2021
Pengerusi
Select only one candidate
Reset
AHMAD ASRI ABD SAMAT
MOHD SAMSUDIN ABDUL HAMID

Vote Preview:



The Admin Panel:



User Interfaces

There are three user roles in this software *viz.* admin, observer and the voter.

Administrator:

The admin interface had the following options:

- **Login facility** (Username and password)
- **Dashboard**: View overall election details
- **Voters: Add/import/delete/update details** (First name, Last name, photo)
- **Candidates: Add/delete/update details** (First name, Last name, post, photo)
- **Positions: Add/delete/update details** (Description and maximum vote per position)
- **Display** ballot positions
- **Configuration: Set the title, date and time** of the polling session.
- **Votes: view/reset** the poll.

Observer:

The Observer interface had the following options:

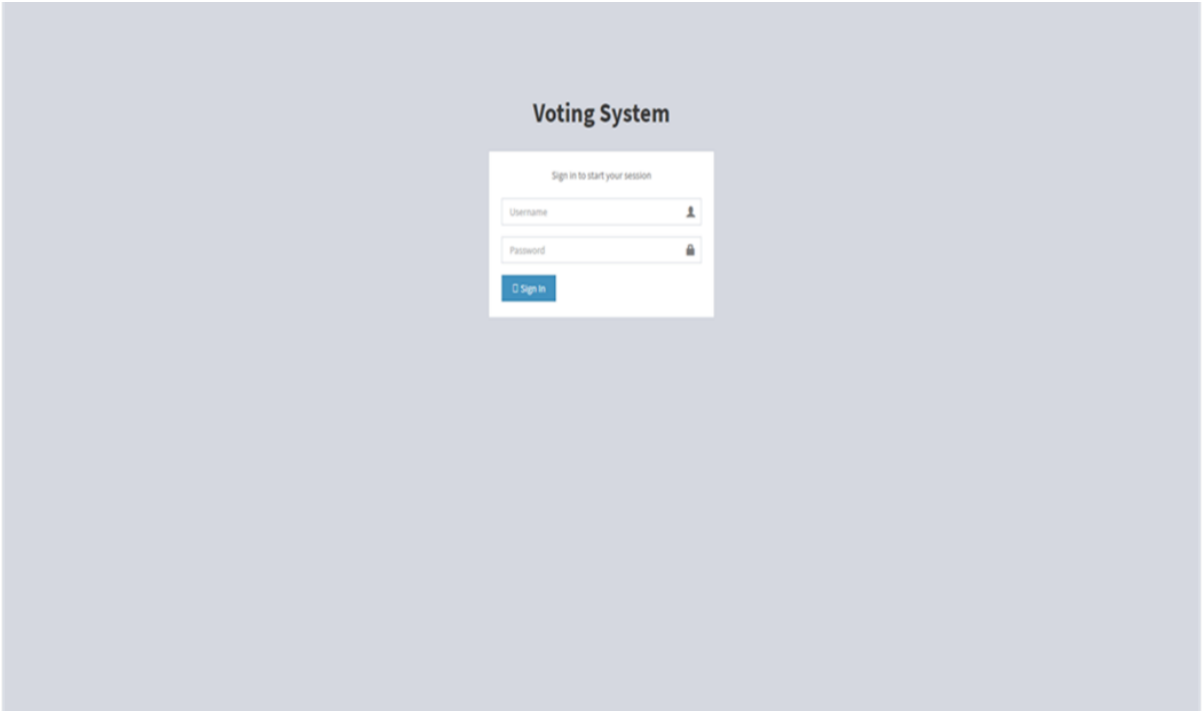
- **Login facility** (Username and password)
- **Dashboard**: View overall election details
- **Voters: View details** (First name, Last name, photo)
- **Candidates: View details** (First name, Last name, post, photo)
- **Positions: View details** (Description and maximum vote per position)
- **Display** ballot positions
- **Configuration: Set the title, date and time** of the polling session.
- **Votes: view/reset** the poll.

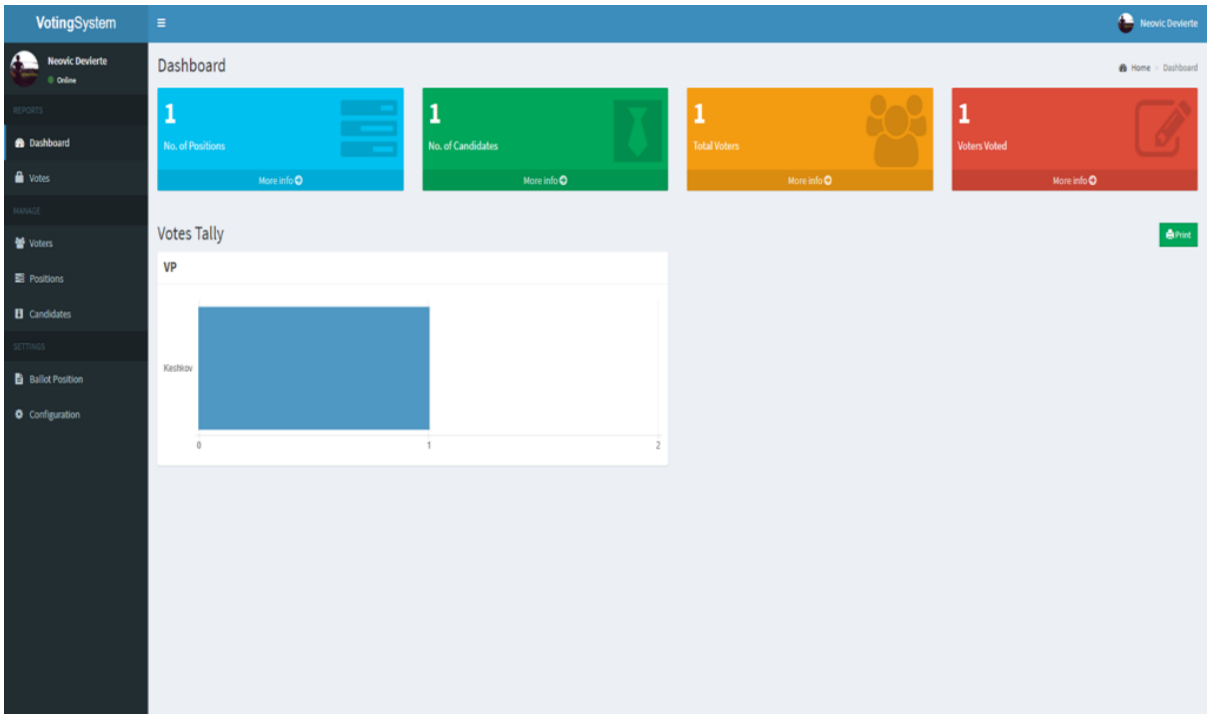
The Voter:

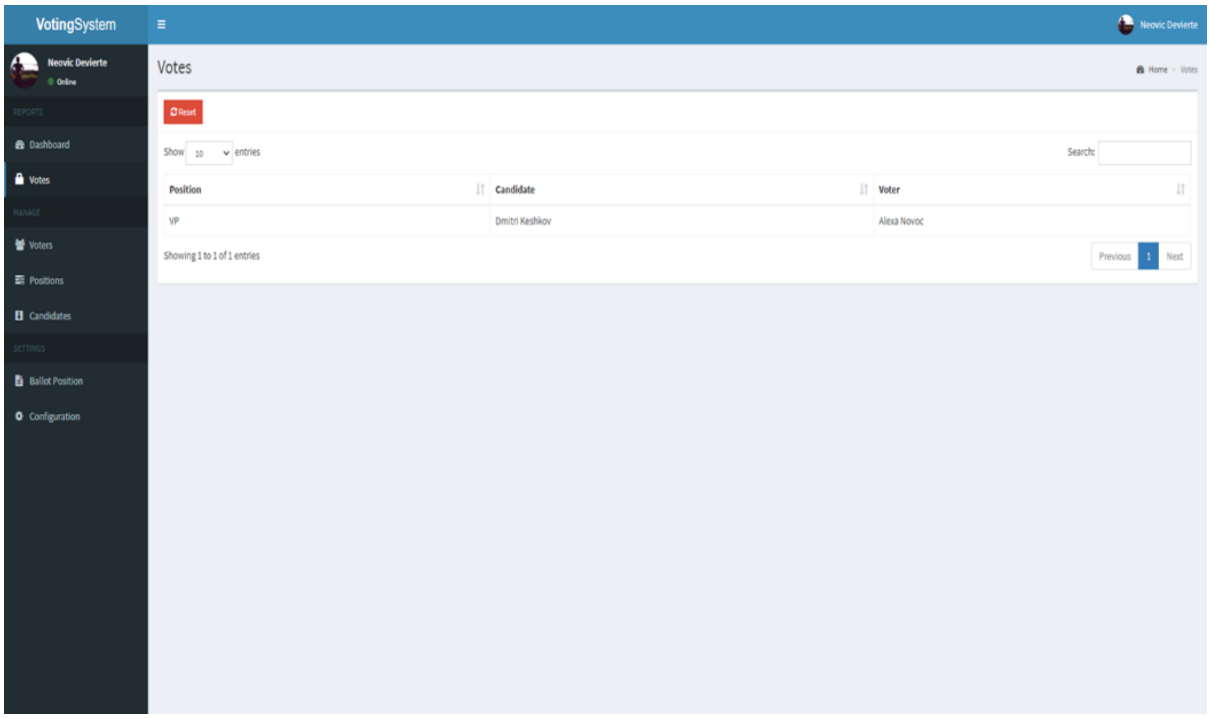
The voter interface had:

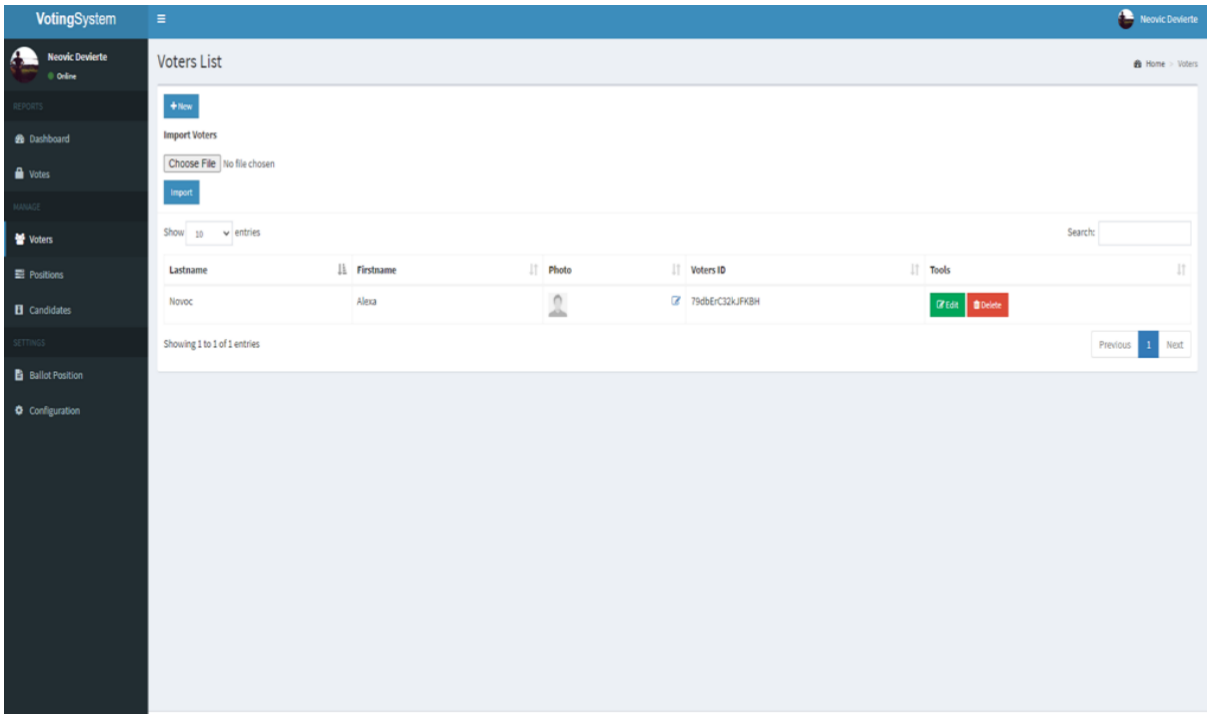
- **Login** facility (Staff ID and password)
- **One time vote casting facility** during the allotted polling time
- **Votes preview**

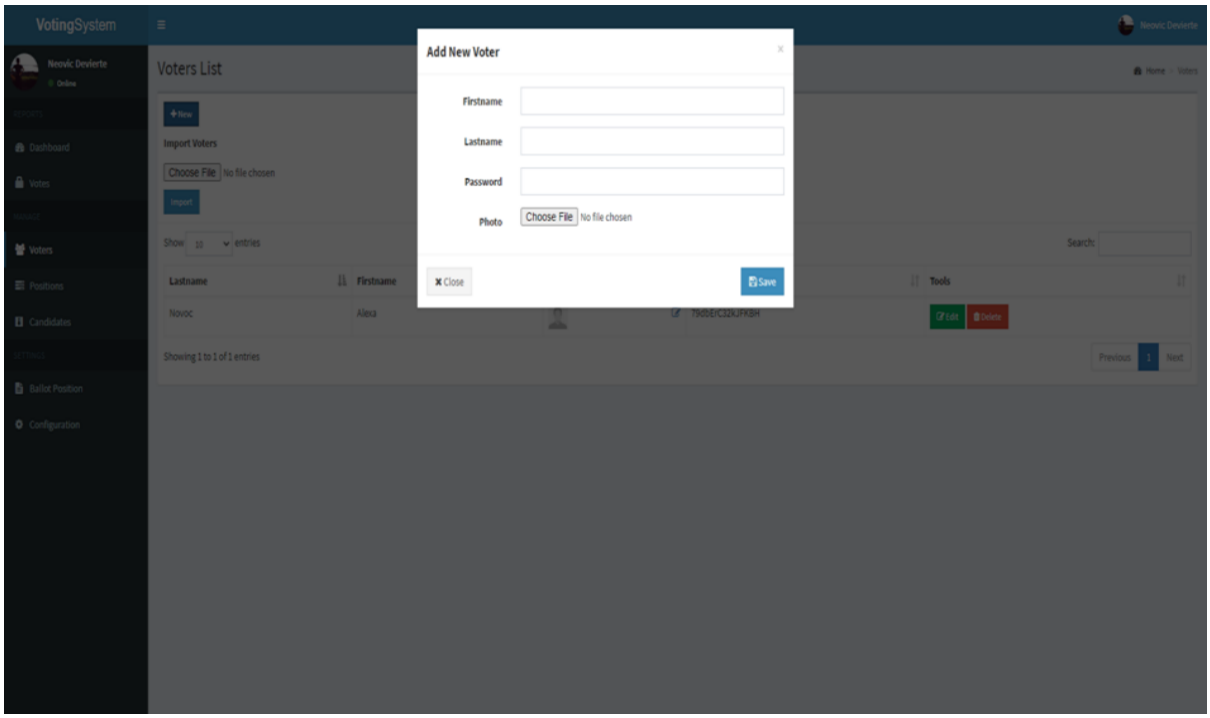
The following images are the previews of the admin interface:

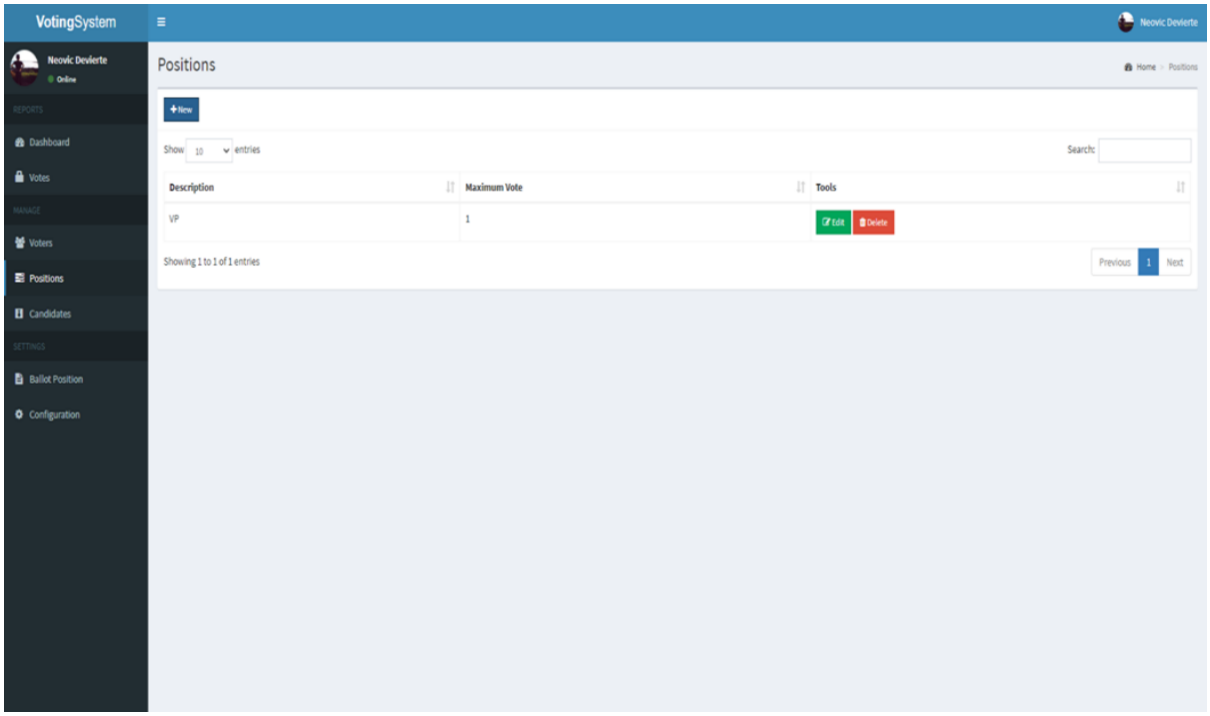


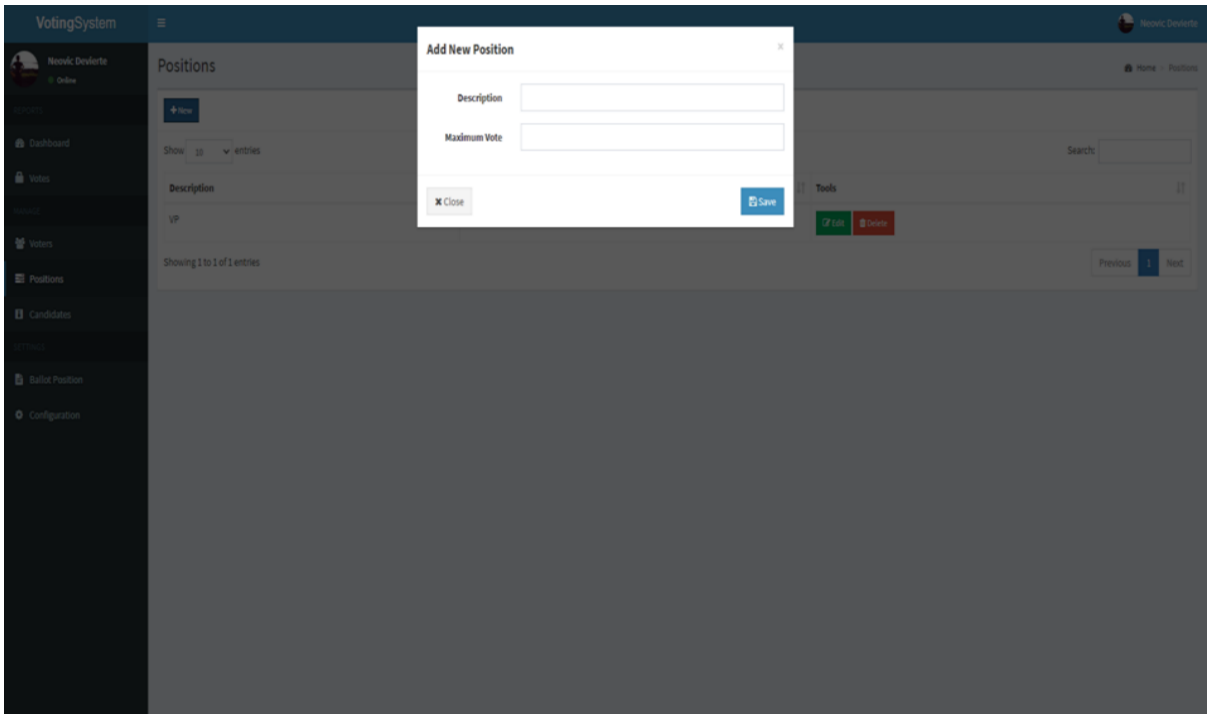


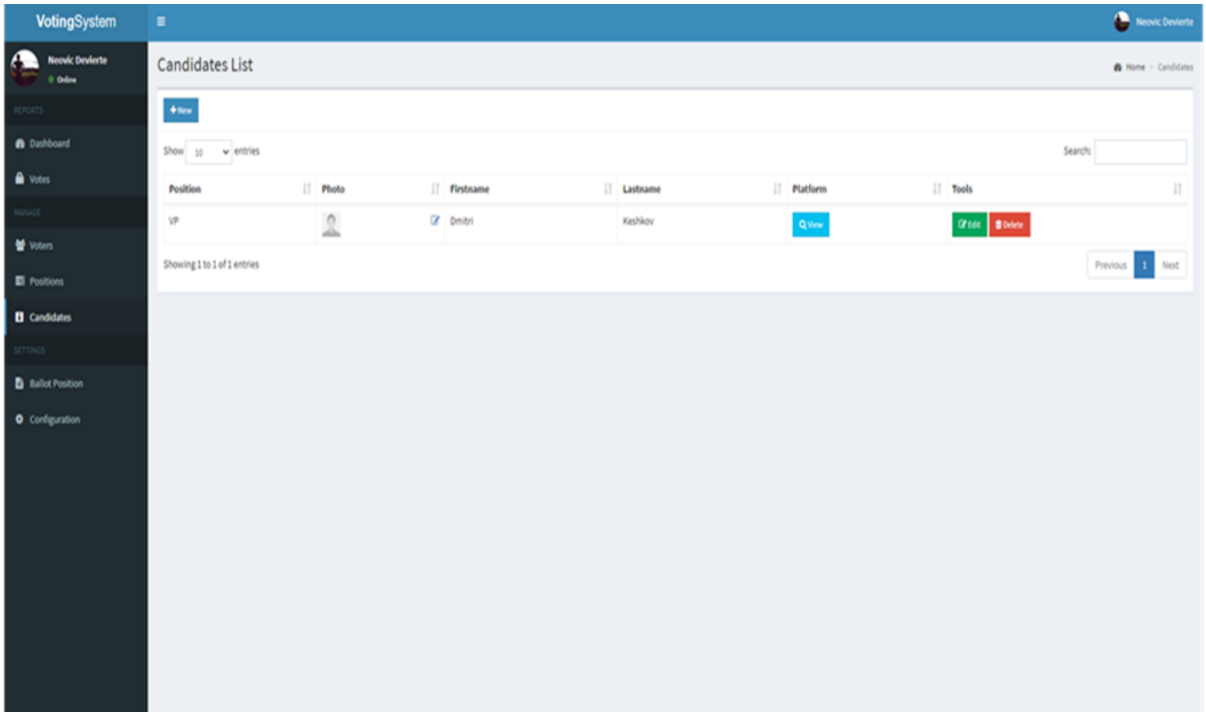

VotingSystem
Neovic Devierte
Online
REPORTS
Dashboard
Votes
MANAGE
Voters
Positions
Candidates
SETTINGS
Ballot Position
Configuration
Votes
Home > Votes
Reset
Show 10 entries
Search:
Position
Candidate
Voter
VP
Dmitri Keshkov
Alexa Novoc
Showing 1 to 1 of 1 entries
Previous 1 Next

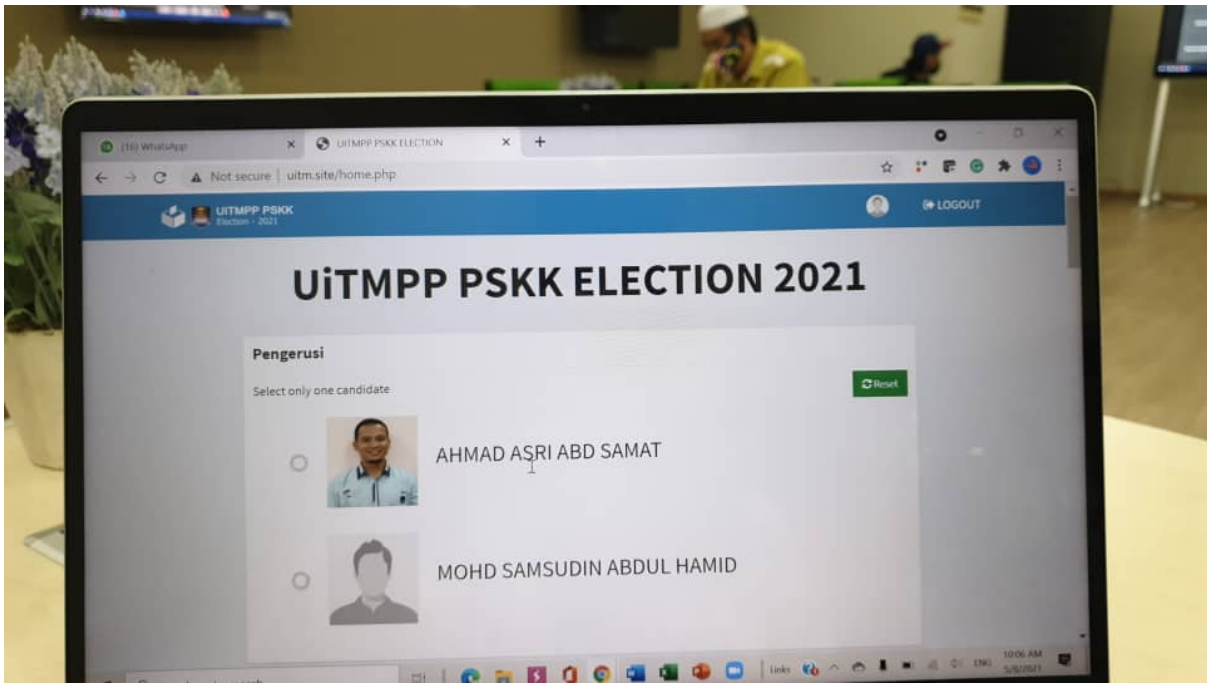

VotingSystem
Neovic Devierte
Online
REPORTS
Dashboard
Votes
MANAGE
Voters
Positions
Candidates
SETTINGS
Ballot Position
Configuration
Voters List
Home > Voters
New
Import Voters
Choose File No file chosen
Import
Show 10 entries
Search:
Lastname
Firstname
Photo
Voters ID
Tools
Novoc
Alexa
79dbErC32kJFKBH
Edit
Delete
Showing 1 to 1 of 1 entries
Previous 1 Next

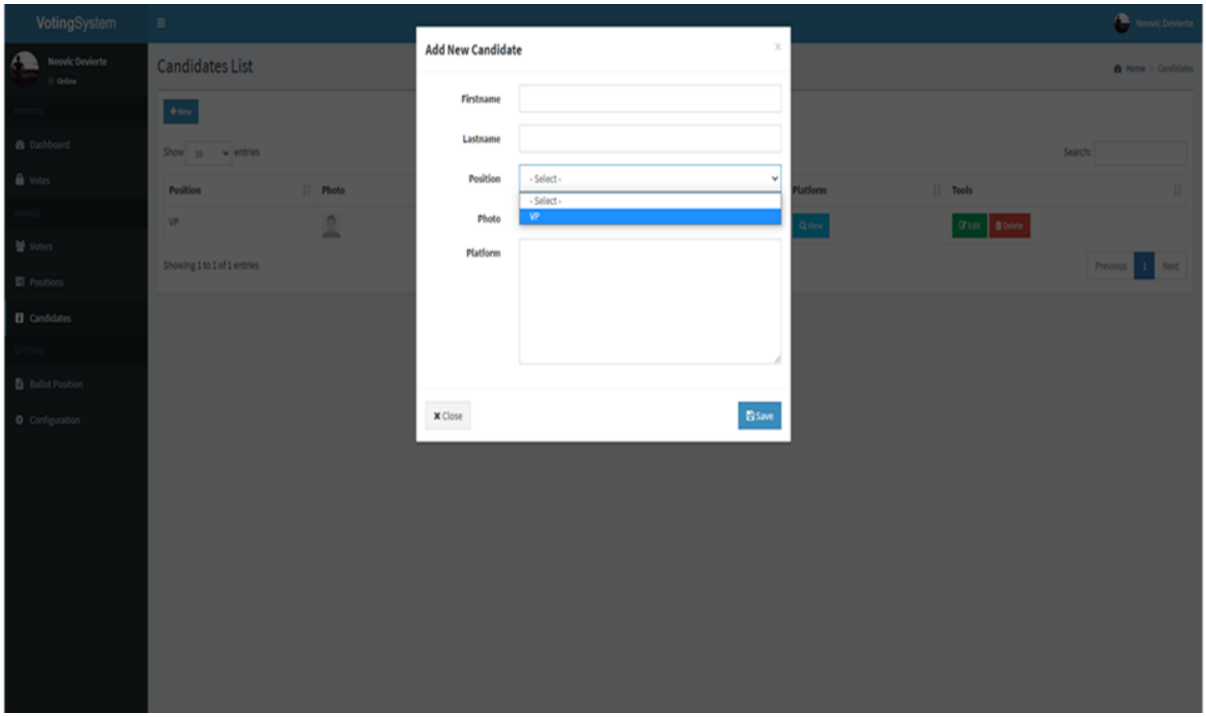

VotingSystem
Voters List
Add New Voter
Firstname
Lastname
Password
Photo
Choose File
No file chosen
Close
Save

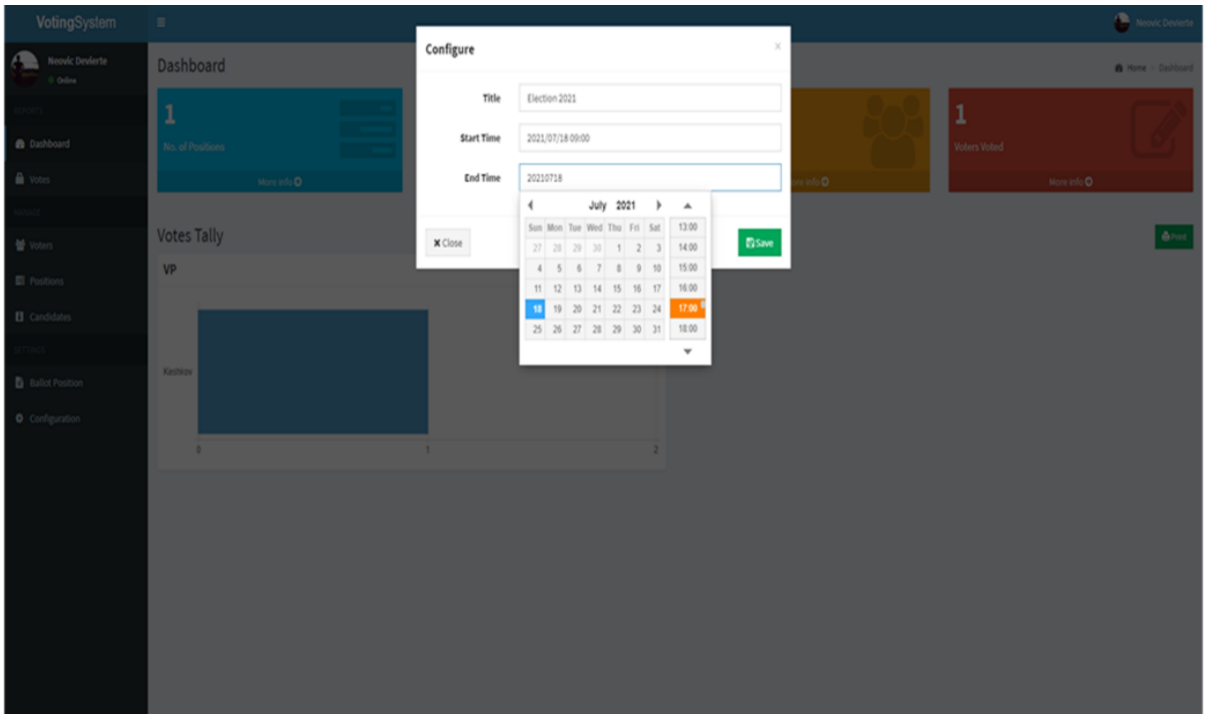

VotingSystem
Positions
Dashboard
Votes
Voters
Positions
Candidates
Ballot Position
Configuration
Description
Maximum Vote
Tools
VP
1
Edit
Delete

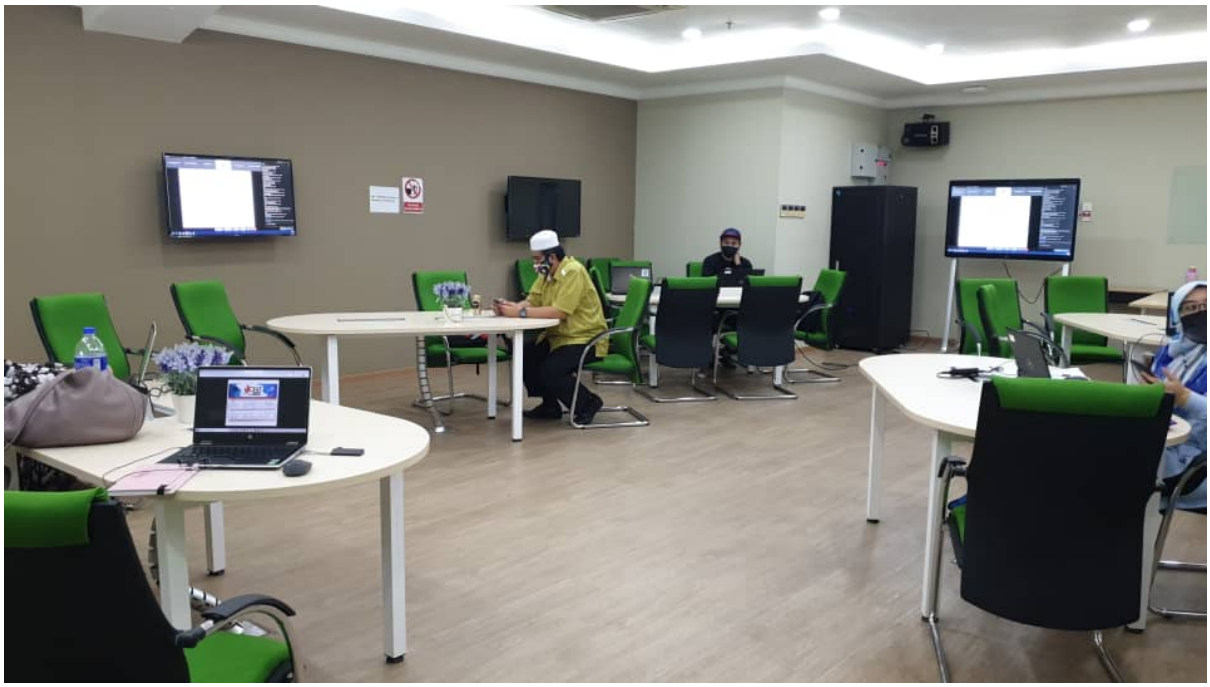

VotingSystem
Positions
Add New Position
Description
Maximum Vote
Close
Save


VotingSystem
Candidates List
Position
Photo
Firstname
Lastname
Platform
Tools
VP
Dmitri
Keshkov
Edit
Delete


UiTMPP PSKK
LOGOUT
UiTMPP PSKK ELECTION 2021
Pengerusi
Select only one candidate
Reset
AHMAD ASRI ABD SAMAT
MOHD SAMSUDIN ABDUL HAMID

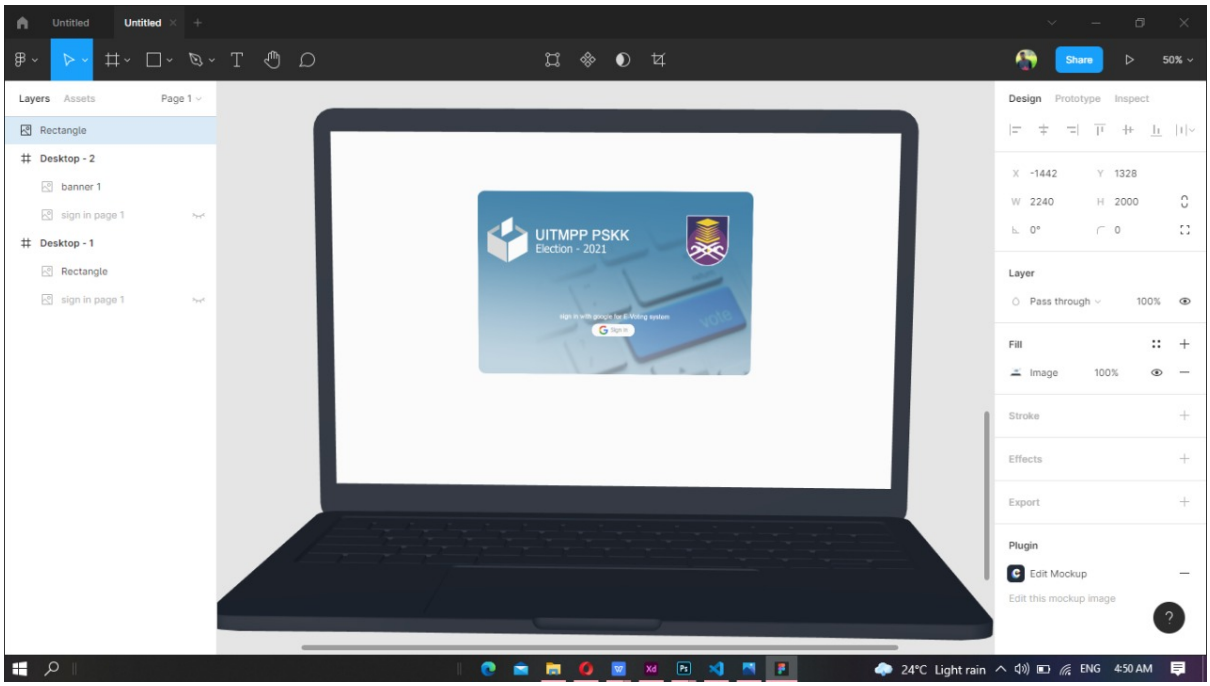

VotingSystem
Candidates List
Add New Candidate
Firstname
Lastname
Position
Photo
Platform
Close
Save


VotingSystem
Dashboard
Configure
Title
Election 2021
Start Time
2021/07/18 09:00
End Time
20210718
July 2021
Close
Save
Votes Tally
VP

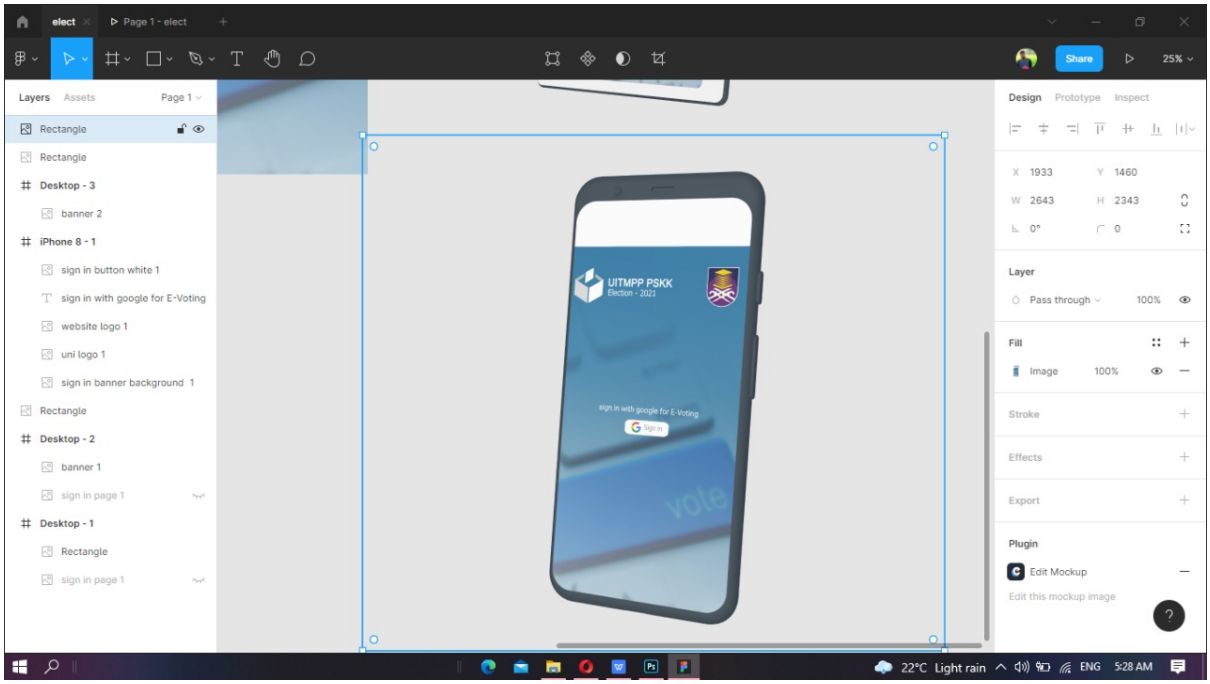


User Interfaces:

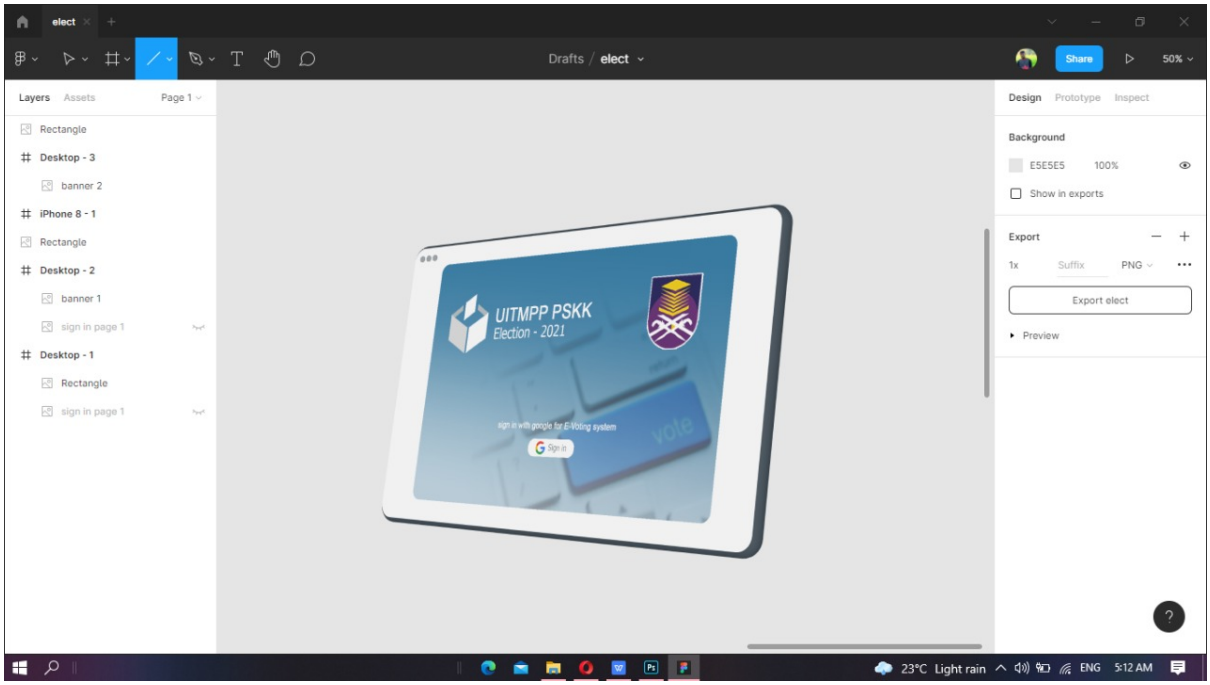
Laptops / Desktops:



Mobile Phones:



Tablets:



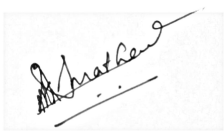
Election Results:

Reception and Feedback

UiTMPP PSKK ELECTION 2021

Result Summary

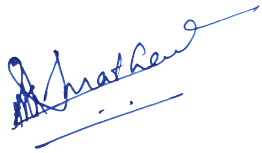
Pengerusi	
Candidates	**Votes**
AHMAD ASRI ABD SAMAT	103
MOHD SAMSUDIN ABDUL HAMID	11
Timbalan Pengerusi	
Candidates	**Votes**
MOHD SAIFUL EFFENDY MOHD SHUKERI	72
MOHD SAMSUDIN ABDUL HAMID	42
Setiausaha	
Candidates	**Votes**
MASRUL FARIHAN MOHAMAD	114
Bendahari	
Candidates	**Votes**
LESAIRUAMIN LEIAHS	114
Penolong Setiausaha	
Candidates	**Votes**
MOHD SAIFUL EFFENDY MOHD SHUKERI	114
Ahli Jawatankuasa	
Candidates	**Votes**
WAN HASZAINA WAN ISMAIL	99
AHMAD KHUZAIRI OMAR BAKHI	92
MUHAMAD KHUZAIMIE AZUDDIN	77
AMIR SHAHRUL ISHAK	65
ANGAYAR KANNI RAMAIAH	58
HAZWAN HASSAN	55
SHAHIRAH KHAIRUDIN	41
MUHAMAD FARID HJ SHUIB	35
MUHAMAD RASHID MUHAMAD YATIM	35
NORHAFIDZAH MAHDZIR	13



Jiju A. Mathew Ph. D.
Consultant - UiTMPP PSKK

Muhammad Fikri Ramli
Observer - UiTMPP PSKK

The application was well received and the fireflies team were successful in conducting the staff elections on 05th August 2021 at 7.30 am (IST) at UiTM. The voters list had 182 entries of which 114 cast their vote. Each voter was offered 20 Malaysian Ringgit to exercise their vote and even then the poll percentage was a mere 62.64. All 114 voters, who wished to cast their vote were able to do so without any technical difficulty. An animated user help video was also supplied to the voters so as to familiarise them with the system.



Jiju A. Mathew Ph. D.

Dean - Planning and Communication &
Head, Department of Computer Science,
St. Thomas College (Autonomous), Thrissur,
Kerala, India.
Email: jijuamathew@st.thoams.ac.in
Phone: +91 9496 1280 82

UiTMPP PSKK
Election - 2021

Online election platform for
Universiti Teknologi MARA (UiTM), Malaysia

powered by

Fireflies
Department of Computer Science
St.Thomas College, (Autonomous) Thrissur
Kerala, India

UITMPP PSKK EL

- You must select in all positions.

Pengerusi

Select only one candidate

AHMAD ASRI ABD SAMAT