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# MERITELITE

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A One-Stop Mobile Solution Designed to Streamline University Merit Events



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# 1 Project Background

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In response to the challenges faced by university students in effectively managing and participating in merit events, the MeritElite mobile application prototype has been meticulously developed. MeritElite is envisioned as a centralized platform designed to transform the university experience by streamlining communication and engagement surrounding merit events.

In the current university landscape, the absence of a dedicated platform for merit events has resulted in decentralized communication, leading to challenges for students in accessing crucial information. The prevalent practice of disseminating event details through various channels, such as telegram groups, has resulted in inefficiencies, missed opportunities, and a lack of a unified and user-friendly system.

This executive summary encapsulates the essence of the prototype, emphasizing its intuitive design, potential commercial value, and the invaluable lessons derived from the development journey. The prototype of MeritElite manifests as a solution that not only addresses the prevailing issues of decentralized communication but also strives to elevate the overall university community experience.

By providing students, event organizers, and administrators with a unified and user-friendly platform, MeritElite aims to redefine how merit events are managed within the university context. Throughout the prototype development, a keen focus was placed on creating an interface that resonates with users. The design emphasizes simplicity, efficiency, and adaptability, ensuring that MeritElite becomes an indispensable tool for students navigating the merit event landscape.

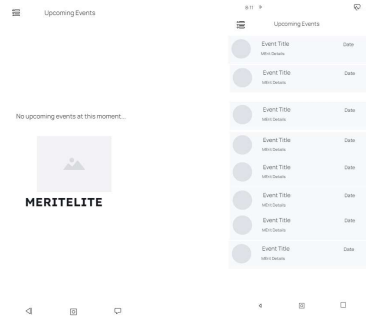
This executive summary provides a glimpse into the comprehensive documentation that follows, covering the prototype's design, user interface intricacies, the potential commercial value it brings to the university ecosystem, and the reflective insights gained through the development process. As MeritElite takes its place as a promising solution, it holds the potential to not only meet the immediate needs of the university community but also pave the way for a more connected, efficient, and engaging campus life.

## 2 Prototype Design:

### 1. Screens and Navigation

#### a. Screens sketches

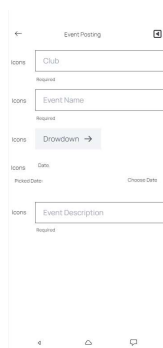
##### i. Homepage



##### ii. Join Event



##### iii. Event Posting



#### b. Navigation

##### i. Home to Event Posting: Drawer

##### ii. Home to Join Event: Clicking on the desired event.

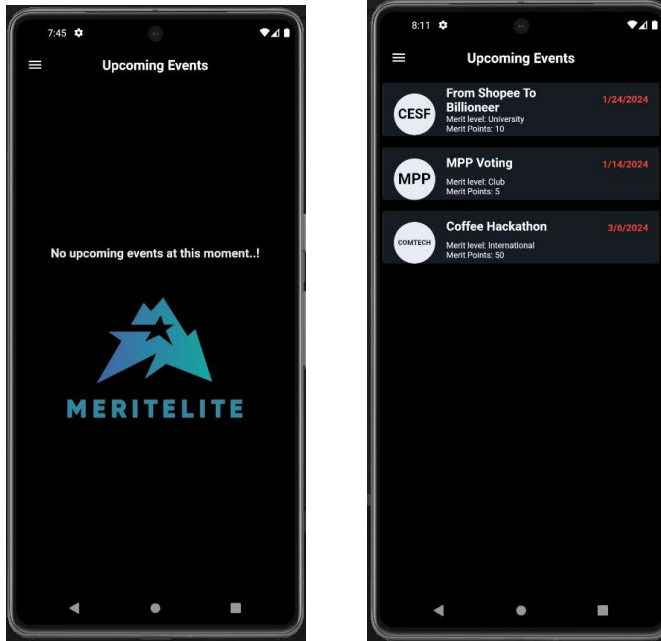
### 2. Theme: Dark with white foreground– High Contrast

### 3. Testing Method: Black Box Testing – Unbiased

### 3 UI & UX

#### 1. Screens:

##### a. Home Page



- Display a list of upcoming events if there is any. Else, display the app logo.

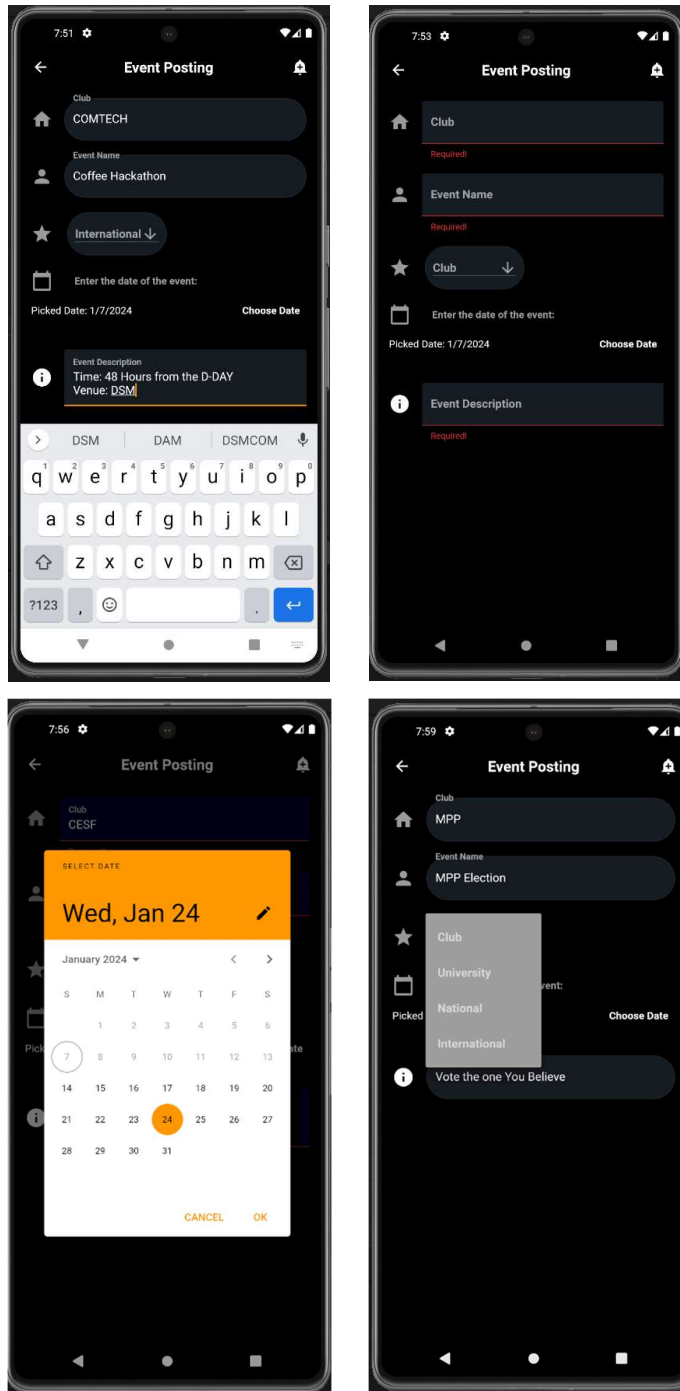
##### b. Join Event



-Display the details of the event

-A button for user to join the event

c. Event Posting



- Simple UI with appropriate labels to guide the user
- Date picker to let user choose the date. Business rule is applied where a new event must be scheduled at least 1 week before the D-Day
- Dropdown menu for the user to choose merit level. Business rules applied where the merit points are automatically calculated.
- Submit the event by clicking the add button at top right conner

## 4 Business Plan

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### Market Dynamics and Demand

The potential commercial value of MeritElite is rooted in addressing a critical gap in the university landscape. With universities facing challenges in managing merit events efficiently, MeritElite emerges as a solution poised to meet the high demand for streamlined communication and event organization. The market dynamics underscore the app's relevance, offering a unique platform tailored to the specific needs of university students, administrators, and event organizers.

### Monetization Strategies

Exploring avenues for monetization, MeritElite presents several strategic opportunities. Premium features for event organizers, sponsored events, and strategic partnerships with university-related brands are key considerations. By providing enhanced functionalities for those organizing merit events, the app introduces a tiered approach that caters to varying user needs while creating potential revenue streams.

### Scalability and Expansion

The scalability of MeritElite extends beyond the immediate university context. The prototype's model, designed with flexibility in mind, positions the app for potential expansion to other institutions. This scalability not only broadens the user base but also opens avenues for collaboration with universities facing similar challenges.

### Value Proposition for Stakeholders

Understanding the value proposition for each stakeholder is paramount. For students, MeritElite offers a seamless experience in navigating and participating in merit events. Event organizers gain access to tools that streamline event management, enhancing their effectiveness. University administrators benefit from improved communication and a centralized hub for merit-related activities.

## Cost Structure

1. Development cost: Free
2. Operational Costs
  - a. Server and hosting expenses  $\approx$  RM 2,000.00 annually
  - b. Maintenance and updates  $\approx$  RM 1,000.00 annually
  - c. Marketing and promotional costs  $\approx$  RM 5,000.00 annually
3. Administrative Costs
  - a. Licensing and legal fees  $\approx$  RM 2,000.00
  - b. Customer support and service-related expenses  $\approx$  RM 3,000.00 annually
4. Marketing and User Acquisition Costs
  - a. Advertising expenses for user acquisition  $\approx$  RM 5,000.00 annually
  - b. Promotional materials and campaigns  $\approx$  RM 2,000.00 annually

## Pricing Models

Crafting an effective pricing model is crucial for the sustainable growth of MeritElite. A freemium model, offering basic functionalities for free and premium features at a subscription fee, ensures accessibility while generating revenue. Additionally, exploring one-time event sponsorship fees (RM 250/collaboration) and partnerships with university housing authorities (RM 12000/year) presents alternative revenue streams.

## Conclusion on Commercial Viability

In conclusion, MeritElite's potential commercial value is grounded in its ability to cater to the unique needs of university communities. By providing a solution that enhances communication, offers valuable features, and explores diverse monetization channels, the app stands as a commercially viable venture. As MeritElite addresses the challenges of decentralized communication in the university landscape, it not only fulfills a crucial niche but also opens doors to sustainable growth and impact.



## 5 Lesson Learned

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1. Flutter Knowledge
  - a. How to implement a DropdownButton widget
  - b. How to implement the showDatePicker function and format the date
  - c. Use ThemeData and customize TextStyle for different text, instead of styling each of them.
  - d. How to create a text field that accepts multiple lines of input (Biessek, 2019)
  - e. How to pass a class object from a page to another page, and add them in a list
2. Domain knowledge(business)
  - a. The need of building a good business model (Longo, 2018)
  - b. Focus on value proposition instead of revenue for a new project
  - c. The need of specifying the cost structure of the project

## 6 Conclusion

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In closing, the journey of developing MeritElite has been marked by innovation, dedication, and a commitment to enhancing the university experience. The prototype, meticulously designed and developed, stands as a testament to the potential of technology to address real-world challenges within the academic community.

Summarizing our key findings, MeritElite emerges as more than just a solution; it is a transformative platform that centralizes and streamlines merit events, fostering improved communication and engagement among students, organizers, and administrators. The prototype showcases a user-friendly interface, intelligent design choices, and adaptability, all aimed at providing a seamless experience within the university landscape.

Reiterating the value proposition, MeritElite not only addresses the immediate need for efficient merit event management but also positions itself as a catalyst for positive change within university communities. By offering a centralized hub, it empowers students, facilitates event organizers, and streamlines administrative processes.

The significance of MeritElite in enhancing the university experience cannot be overstated. It goes beyond solving a specific problem; it redefines campus life by fostering a sense of community, efficiency, and collaboration. As we envision the potential impact of MeritElite on the university community, we see a future where communication is streamlined, events are organized seamlessly, and the overall campus experience is elevated.

In conclusion, MeritElite is not just an application; it is a transformative solution poised to redefine how universities manage and participate in merit events. The prototype's achievements set the stage for further development, fine-tuning, and eventual implementation. MeritElite is not merely an idea; it is a journey towards a smarter, more connected, and efficient university community.

## 7 References

### Book References

Biessek, A. (2019). *Flutter for Beginners*. Mumbai: Packt.

Coleman, B. (n.d.). How to Write a Great Value Proposition [7 Top Examples + Template].

Longo, R. (20 October, 2018). *Do You Really Need a Business Plan?* Retrieved from Small Business Development Center, Duquesne University: <https://www.sbd.cdu.edu/Blog-Item-The-Importance-of-a-Business-Plan#:~:text=To%20make%20sound%20decisions,creating%20value%20for%20your%20customer.>

### Code References

```

168 //a drop down menu to let user choose from a list of merit level
169 /*****
170 * Title      : DownDown Menu
171 * Author     : Benyamin
172 * Date      : 7/1/2023
173 * Code version : 1.0
174 * Availability : https://stackoverflow.com/questions/69067627/using-list-of-options-in-textformfield
175 *****/
176
177 Row(
178   children: [
179     const Icon(
180       Icons.star,
181       size: 30,
182       color: Colors.white60,
183     ), // Icon
184     const SizedBox(
185       width: 20,
186     ), // SizedBox
187     Container(
188       padding: const EdgeInsets.all(10),
189       height: 60,
190       decoration: BoxDecoration(
191         border: Border.all(
192           color: const Color.fromRGB(33, 38, 45, 1),
193           width: 1,
194           style: BorderStyle.solid,
195         ), // Border.all
196         color: const Color.fromRGB(22, 27, 34, 1),
197         borderRadius: BorderRadius.circular(30)), // BoxDecoration
198     child: DropdownButton<String>(
199       dropdownColor: Colors.grey,
200       value: meritlvlValue,
201       icon: const Icon(
202         Icons.arrow_downward,
203         color: Colors.white60,
204       ), // Icon
205       iconSize: 24,
206       elevation: 16,
207       style: const TextStyle(
208         color: Colors.white60,
209         fontSize: 16,
210         fontWeight: FontWeight.bold), // TextStyle
211       onChanged: (String? newValue) {
212         setState(() {
213           meritlvlValue = newValue!;
214         });
215       },
216       items: <String>[
217         'Club',
218         'University',
219         'National',
220         'International'
221       ].map<DropdownMenuItem<String>>((String value) { // <String>[]
222         return DropdownMenuItem<String>(
223           value: value,
224           child: Text(value),
225         ); // DropdownMenuItem
226       }).toList(),
227     ), // DropdownButton
228   ], // Container
229 ), // Row

```

```

233 //date time picker to ente event date
234 /*****
235 * Title      : DatePicker
236 * Author     : Dr. MNor
237 * Date       : 7/1/2023
238 * Code version : 1.0
239 * Availability : Expense App
240 *****/
241 //modification is made to _presentDate picker to change the first and last date
242 SizedBox(
243   height: 90,
244   child: Column(
245     children: [
246       const Row(
247         children: [
248           Icon(
249             Icons.calendar_today,
250             color: Colors.white60,
251             size: 30,
252           ), // Icon
253           SizedBox(
254             width: 30,
255           ), // SizedBox
256           Text(
257             "Enter the date of the event:",
258             style: TextStyle(
259               color: Colors.white60,
260               fontWeight: FontWeight.bold, // TextStyle
261             ), // Text
262           ], // Row
263         ), // Row
264         const SizedBox(
265           height: 2,
266         ), // SizedBox
267         Row(
268           children: [
269             Expanded(
270               child: Text(
271                 _selectedDate == null
272                   ? 'No Date Chosen'
273                   : 'Picked Date: ${DateFormat.YMd().format(_selectedDate)}',
274                 style: const TextStyle(color: Colors.white),
275               ), // Text
276             ), // Expanded
277             TextButton(
278               onPressed: _presentDatePicker,
279               child: const Text(
280                 "Choose Date",
281                 style: TextStyle(
282                   fontWeight: FontWeight.bold,
283                   color: Colors.white, // TextStyle
284                 ), // Text // TextButton
285             ), // Row
286           ], // Row
287         ), // Column
288       ), // Column
289     ], // Column
290   ), // Column
291 ); // Column
292
293 TextFormField(
294   //to get a large text field for description
295   /*****
296   * Title      : Multiple Line Text Field
297   * Author     : Fellipe Sanches,Philippe Fanaro
298   * Date       : 7/1/2023
299   * Code version : 1.0
300   * Availability : https://stackoverflow.com/questions/69067627/using-list-of-options-in-textformfield
301   *****/
302   keyboardType: TextInputType.multiline,
303   maxlines: null,

```