



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

FACULTY OF COMPUTING
UTM Johor Bahru

SEMESTER 1 2023/2024

Subject : Technology Information System (SECP1513)
Section : 04
Task : Project Proposal
Group : TechManiacs™

CLIENT BACKGROUND: UTM Students

UTM students have various means of transportation to get around the university, with the UTM bus being the preferred choice due to its accessibility and cost efficiency. However, significant number of students have expressed frustration due to absence of good bus tracking at UTM, leading to disruptions in their schedules. To tackle this issue, we propose implementing a platform that allows students to conveniently monitor the whereabouts of all UTM buses, with what we name the project as UTM Bus Tracking System (UTM BTS). Through this solution, we aim to alleviate the high demand for UTM buses among students without the cost of buying or renting more buses.

EXISTING TECHNOLOGY: Moovit

Moovit is an online transportation tracking app that is used by a lot of Malaysian. Moovit provides transit guides for their users, allowing them to find the right buses to get from one point to another according to users' preferred time of departure as well as preferred bus.

PROBLEM WITH EXISTING TECHNOLOGY

Although very convenient and helpful, Moovit does not provide real time tracking system on their bus for free. The technology only provides estimated time of arrival according to congestion, and users are unable to determine the location of the bus at all times to match with their schedules. Due to this, a lot of users voiced their dissatisfaction with being unable to keep track of their bus and subsequently missing their buses.

PROPOSED IDEA

Our project, UTM BTS, allows users to keep track of their buses using real time tracking system by implementing the use of GPS. UTM BTS also provides student identification system in which only students with verified student matric number are allowed to use the application, and bus drivers can scan verification QR code on students' phone or scan the students' matric card to allow use of UTM bus. Furthermore, UTM BTS alerts drivers for more supply of UTM bus according to demands of students by gathering report and data through pop up messages on the application. UTM BTS also provides rating system where students are able to rate a bus where students are allowed to rate one bus per day.

BENEFITS OF PROPOSED IDEA

Features	UTM BTS	UTM SMART SHUTTLE	MOOVIT
Real-Time Tracking	Yes	No	No
Bus demand management	Yes	No	No
Accessibility	Only to UTM students	UTM SMART users	To public
Detailed route	Yes	No	Yes
Rating System	Yes	No	No