National Grassroots ICT Research Initiative – (2015-16)

Final Year Project (FYP) Nomination Form

University/Institute Detail:

Name of University/Institution	Bahria University (Karachi Campus)	Physical Address:	National Stadium Road Karachi
Telephone & Fax No:	+92 21 111 111 028	Department Name:	Software Engineering
City:	Karachi	Province:	Sindh

Nominated Project Details:-

Project Supervisor Name and Designation:	Engr. Wafa Qaiser Khan	Contact Details:	Email: Cell No Off No: 03452896663
Project Supervisor Qualification:	MS (SE)	No of Publications of Supervisors:	8
Students Name(s):	1. Muhammad Sajjad Arif 2. Muhammad Moaz Hassan 3. Muhammad Haris Ali 4._____	Students Mobile No:	1. 03320307817 2. 03332579199 3. 03453280363 4._____
Students CGPA	1. 3.2 2. 2.7 3. 2.8 4._____	Students Email:	1. sajjadarifgul@gmail 2. maaz773@hotmail 3. mharisali739@gma 4._____
Degree Programme/ Title:	Bachelor of Software Engineering	Area of Specialization:	Mobile Applications

Final Year Project Details:

A. Project Title:	**Transit Pakistan**
B. Project Start Date:	**3 August 2015**
C. Project Finish Date:	**~30 May 2016**
D. Project Summary (less than 200 words)	

Karachi is the biggest city and financial hub of Pakistan whose population is about 14,500,000 citizens and more than 2 million people of this city commute through public transport on daily bases. There exists a vast majority of these commuters who have obscure information about public transport and their routes which led them to misguidance and wastage of time on bus stops. According to the research an average commuter waste around 20 minutes per day waiting at bus stop which is around wasting 10 days per year.

The project is develop to resolve these issues and provide a convenient platform to the commuters so that they can easily access public transport information like bus routes along with other cost-effective travel options like cab service, taxis and rickshaw. The application will let them know about the fares for the selected ride option and approximated average time to reach the destination.

We also resovlve the issue for those commuters who don't have an android phone or access to internet by providing the SMS service so that our application will empower commuters and enhance the reach of urban transport. Transport is the backbone behind the largest GDP generating city Karachi, so the problems faced by 2 million of its commuters need to be addressed. Transit will play a vital role in minimizing the problems related to Karachi transport.

E. Project Objectives:	

- **Letting People Access to Transport Information**
- **Increasing the reach of urban transport to more people**

F. Project Implementation Method	

- **Since our project involve different phases which can only be started once the previous phase complete its execution that's why we are using spiral methodology to cover all software development lifecycle activities in each phase of our project before moving to other phase.**

G.	**Key Milestones of the Project with dates**		
S.No	Elapsed time since start of the project	Milestone	Deliverable
1.	9 Nov 15 – 30 Nov 15	Transit Tool	Admin Dashboard
2.	30 Nov 15 – 15 Jan 16	Query Process Server	Online Server
3.	15 Jan 16 – 7 Feb 16	API	Query able API Server
4.	8 Feb 16 – 8 May 16	Android App	Mobile App
5.	9 May 16 – 25 May 16	SMS Service	SMS Based Service

Please add rows if required

H.	**Final Deliverable of the Project:**	(Please tick one of the following)

☐ Hardware System	• Software System	☐ HW/SW integrated system
☐ Software Simulation results	☐ Comparative Study	☐ Theoretical Design/Architecture
☐ Simulator Design	☐ Other Please specify	

I.	**Please Specify Technical Details of Final Deliverable**	

The final deliverable will be a software system designed as mobile app on android platform whose backend will be on our online server that can respond the queries asked by API. This API will be used inside the app to call results from server. These results will in return be displayed across multitude of devices such as mobile app & our server. Other developers can also use this API in their developments.

J.	**Equipment required for making prototype/working model:**	(Please indicate in tabular form the required equipments along with estimated cost)

- **Online Server with around 10 GB of hosting –**   5000 Rs/-
- **Domain Name to Host API & Website –**   2200 Rs/-
- **GSM Modem with Internet Access for SMS –**   2000 Rs/-
- **   Total = 10,000 Rs/-**

K.	**Benefits of the Project**	(Please specify Direct/Indirect beneficiaries)

- **General Public**
- **Public Transport Companies**
- **Public Transport Owners (Taxi Drivers, Rickshaw Owners etc)**
- **Development Team**

It is certified that the FYP titled "_Transit Pakistan – Public Transport Assistant App_ " has been approved and is being undertaken by the above mentioned students as their Final Year Project.

It is undertaken that the undersigned have understood the "terms & conditions" of the program, and further reiterate that, if the subject FYP is approved for funding, the disbursed funds shall be utilized as per "terms & conditions" and the undersigned will be liable to reimburse/refund the unutilized amount and other cost not approved by the National ICT R&D Fund, if any.

It is further undertaken that after utilization of funds, the said "Fund Utilization Report" shall be furnished along with the other required deliverables as and when required by the National ICT R&D Fund.

1. Name, Designation& Signature of Supervisor:_____

2. Name & Signatures of HOD: _____

L. For Office Use Only :
(Please encircle the status of FYP)

Project Status	**Approved**	**Not Approved**
Evaluator's Name	_____	
Evaluators Signature	_____	