

# International Internet Café

## Project Charter

### 1. *System Objective:*

The objective of the new Internet Administration System is to provide an unrestricted Internet connection for Ad hoc wireless and wired users – while tracking the amount of time and bandwidth consumed so that customers will be billed appropriately. The information gathered from this system will then enable the Marketing team to focus it's advertising across southern Ontario.

In order to be successful this project must have all of the core features completed by April 25, 2007. Nice to have features will be given a priority, and completed as time allows.

### 2. *Project Roles/Responsibilities:*

Nathan Joyes	Project Manager and Systems Developer
Rob United	Managing Partner International Internet Café
Cheryl United	Managing Partner International Internet Café
Judy Foreman	CFO International Internet Café
Cera Jones	Marketing Director International Internet Café
Branch Manager	Systems Requirements Resource
Host/Hostess	Systems Requirements Resource

### 3. *Business Benefits:*

The immediate benefit from the Internet Administration System will be increased availability for the customers who wish to use the Internet. Rather than having to wait for a free computer or a host/hostess's help, a customer's personal computers may be used instead to connect to the Internet. Other benefits will include:

- Reduced hardware expenses – Internet access will be available through personal laptops rather than Café owned computers, this means fewer hardware repairs, and technical support calls.

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- Focused Marketing – to gain Internet access users will have to login and provide their home address, the Marketing department can use this information to focus its advertisements across southern Ontario.
- Redirected Staffing – less computers in the bank will also mean less staff time spent serving the Internet customers, these staff can then be used to improve the service for the other customers in the café.

## 4. System Capabilities

### Functional Requirements

In order to achieve the business benefits listed, the new system will include the following functional requirements:

- Reporting – will provide the marketing department with customer statistics, it will also allow the customer to login, and view the current state of their account. Some of the report will be built to show live data.\*
  - ◆ Internet traffic usage
  - ◆ Internet sales by Café location
  - ◆ Internet sales by customer home address
  - ◆ Daily sales
- Track Internet Usage – will track the amount of Internet traffic that a customer uses.
  - ◆ Time used
  - ◆ Bandwidth volume and Internet services used\*
  - ◆ Café location
  - ◆ Internet sites visited\*
- Manage customer accounts
  - ◆ Credit card information
  - ◆ Home address
- Manage the café billing rates
  - ◆ Internet usage per time period
  - ◆ Internet usage by bandwidth used\*
- Customers login to gain Internet access
  - ◆ Customer will be automatically logged off after X minutes, an optional choice for the customer when they login
- Customers log-off to close Internet access

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- ◆ Maximum time spent on-line for any customer will be set by the Branch Manager
- ◆ Administrator setting to automatically log customers off after X minutes of zero Internet activity\*
- Customer printing
  - ◆ Provide customer with the use of the café printers, automatically credit each page printed to their account\*
- Integrated with POS
  - ◆ integration of this system with the POS would give customers the ability to order menu items from their computers without having to get in line\*

\* Functional requirements are considered to be “Nice to Have” and will be given a priority and completed as time allows

### Non-Functional Requirements

To properly support the business benefits, and functional requirements, of the new system the following non-functional requirements will be included:

- Technical – front end will be a platform independent browserbased application, allowing customers with all types of operating systems connect provided they have proper hardware
- Performance – data screens will appear on user's screens with no noticeable pauses. Data requests will be loaded within 3 seconds
- Usability – critical data (customer sign-on, customer sign-off, etc.) will be available within 5 mouse clicks
- Reliability – data snapshots of customer transactions will be taken every hour, and saved to removable hard drive. Snap shots from hard drive to be sent off-site nightly
- Security – all confidential data will be transmitted of the network using a Secure Socket Layer encrypted connection

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## 5. Event Table:

<i>Event</i>	<i>Trigger</i>	<i>Source</i>	<i>Use Case</i>	<i>Response</i>	<i>Destination</i>
New customer wants to use the café	Customer signs up for a new account	Customer	Add customer	Customer added	System
Customers information has changed	Customer updates their personal information	Customer	Update customer	Customer updated	System
Customer wishes to start using the café's Internet	Customer connects to café network and logs on	Customer	Customer login	Start customer transaction	System
Customer has finished using the café's Internet	Customer logs off of system, and disconnects from network	Customer	Customer log off	End customer transaction	System
Customer added to banned list	Customer caught abusing the system	Branch Manager	Ban Customer	Customer's account is disabled	System Customer
Customer has been using the café's Internet for the maximum amount of time / not been active	Customer is automatically logged off of the system	System	Customer disconnected	End customer transaction	System
End of the day	End of the day processing is run	Café Host/Hostess	Bill Customers	Build billing list	System Bank

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## **6. Project Critical Success Factors:**

To ensure the success of this project, it will require:

- photocopies existing Internet sign up forms
- sample flyer's and promotional playbills, etc
- Branch Managers are available for interviews
- Customer survey to be conducted in Branch offices
- Branch Managers are available to be job shadowed
- Café Hosts/Hostesses are available to be job shadowed
- Café Hosts/Hostesses are available for interviews

## **7. Preliminary Technical Architecture:**

To ensure the success of the project many different computer systems components will be required. The following is a list of the requirements by location, and a description of what the computer component does in the system.

Head Office will require one server class computer (mid-high range). It will maintain a backup copy of the Branch office data snapshots. These snapshots will be imported into the Head Office database for Marketing and Executive analysis. The server will run Linux, MySQL, Tomcat, and Rsync. Head office will also require workstation class computers for running analysis and reports.

Each Branch Office will require one server class computer (low-mid range). It will regulate each customer's Internet connections, as well as record the details about the customer's Internet activity. The server will run Linux, MySQL, and Tomcat. Branch offices will require a high speed Internet connection, if they don't already have one. Branch offices will also require at least one of: a wireless access point, a publicly accessible set of wired network connections, or a public bank of computers.

## **8. Project Development Infrastructure:**

To ensure the success of the project many different tools will be used in the development process. The following is a list of the development tools and their descriptions that will be used in the process.

Sourceforge.net – on-line open source development tool that can be used for version control,

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change request management, and as a project backup.

NetBeans – the enterprise version will be used to build the Analysis and Design UML documentation, as well environment will be used in the development of the system components in the following languages Java, JSP, C.

DBDesigner4 – this open source program will be used in the development of the required database schemas.

libpcap – open source packet capture library that provides a high level interface to capture network packets. This library will be used in the development of bandwidth monitoring tool.

tcpdump – open source front end to libpcap. The project source code will be used as a reference to how to properly use the packet capture library.