

# CMC

Care of Mother & Child



**Team08**

**Manish Thapa**

**Madan Kadariya**

**Gobinda Kandel**



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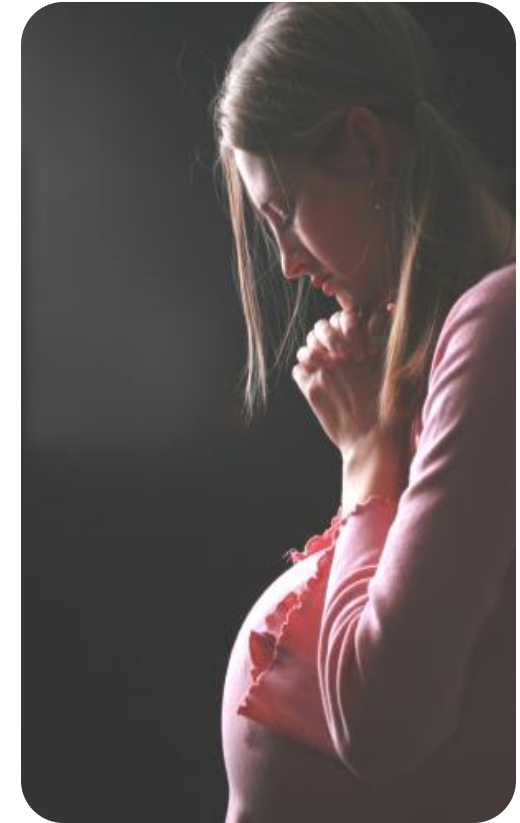
# Motivation

## •Problem:

- Developed or Developing nations -> Busy with common problem and they forget the important information!!!!
- My sister -> forget to take vaccination while she was pregnant!!
- Health worker Life is difficult to manage.

## •Is there any possibility?

- **YES**
- small application can provide the personal care, send the important information and that would be **CMC**.



# UN MDG & FACTS

## GOAL 4:

### REDUCE CHILD MORTALITY

- Target 1:  
Reduce by two thirds, between 1990 and 2015, the under-five mortality rate

## GOAL 5:

### IMPROVE MATERNAL HEALTH

- Target 1:  
Reduce by three quarters the maternal mortality ratio

#### QUICK FACTS

- » Estimates for 2005 show that, every minute, a woman dies of complications related to pregnancy and childbirth. This adds up to more than 500,000 women annually and 10 million over a generation. Almost all of these women – 99 per cent – live and die in developing countries.
- » Maternal mortality shows the greatest disparity among countries: in sub-Saharan Africa, a woman's risk of dying from treatable or preventable complications of pregnancy and childbirth over the course of her lifetime is 1 in 22, compared to 1 in 7,300 in developed regions. The risk of a woman dying from pregnancy-related causes during her lifetime is about 1 in 7 in Niger compared to 1 in 17,400 in Sweden.
- » In 2005, more than 1 million children are left orphaned because of maternal death. Orphaned mothers are up to 10 times more vulnerable than those who have not.

There has been a tremendous increase in the use of cell phones in the past decade. By the end of 2008, worldwide use of mobile phones had increased to about 4.1 billion. (1)

In Africa alone, mobile phone sales have grown by 550 percent in five years, according to The United Nations Conference on Trade and Development. (2)



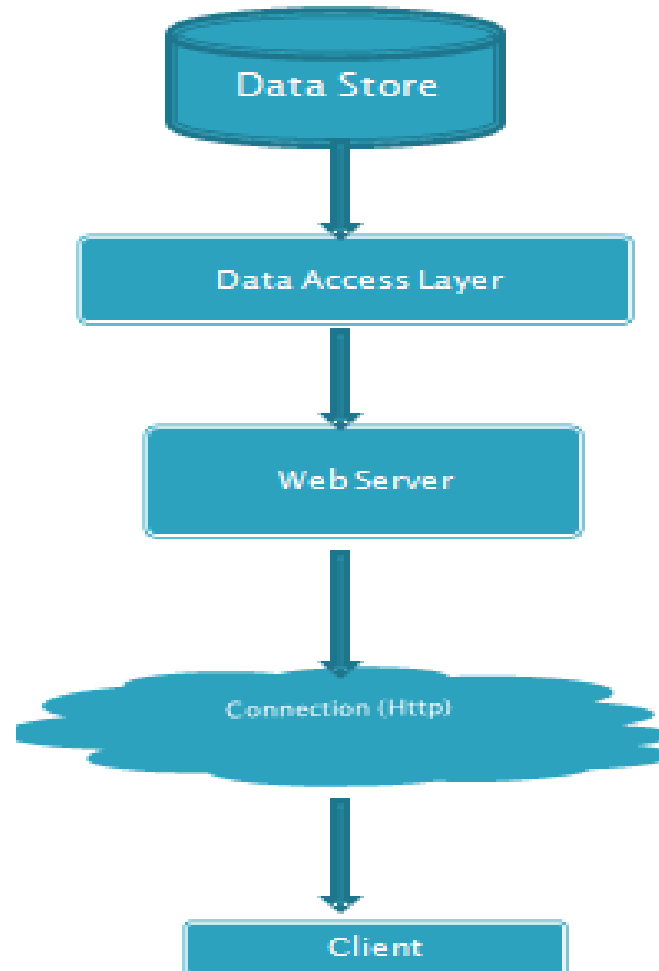
## What CMC does?

- CMC [Care of Mother & Child]
- User creates profile and provide pregnancy date
- It provides the **diet, symptoms info, child care info and vaccination** alerts automatically on timely basis.
- Autonomous Message Service via **SMS** and **Email** notifications

# Technology /Architecture

- Framework
  - Microsoft .NET Framework version 3.5 SP1
  - ASP. Net
- Language
  - C#
- Database
  - MS SQL Server 2008
- Tool
  - Microsoft Visual studio 2008

3 tier architecture followed  
Presentation  
Web Services  
Data Access



# Implementation challenges

- SMS Gateway was not freely available
  - Test gateway is used for simulation.
- Simulating the service scenario within short demo
- Our Focus during codecamp
  - Rather than beautiful UI, creating autonomous environment using webservice

## Future Extension

- Health worker coordination with pregnant women
- Statistical Report Generation
  - child birth and mortality rate, seasonal and region based problem.
- Development for mobile environment as well.



# Summary

- CMC, helpful not only for pregnant women but also useful for health workers
- CMC will support the UN-MDG 4 & 5

## ACKNOWLEDGEMENT

All mothers in the world.  
To all participants and organisers of .NET Code Camp  
2010 @ LUT.



Thanks for listening to us