

CMC

Care of Mother & Child



Team08

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.NET Code Camp

LUT, 25.-29.1.2010

Overview

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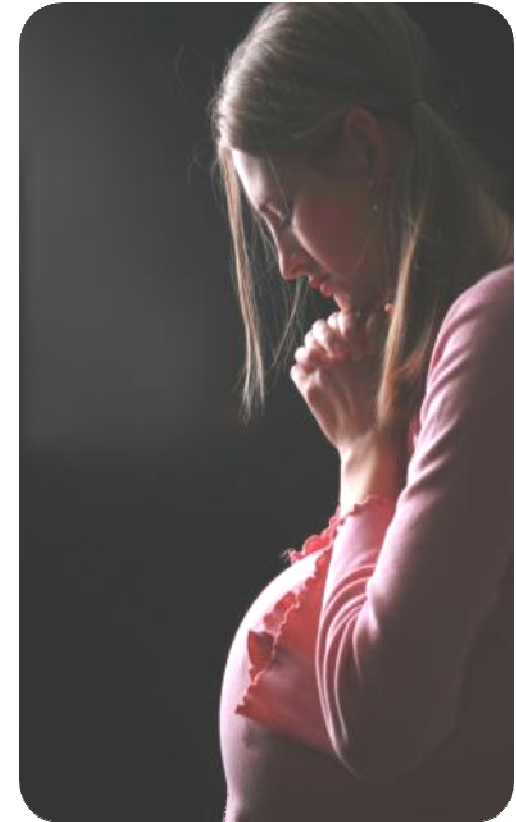
Motivation

•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 Millennium Development Goals

GOAL 4:

REDUCE CHILD MORTALITY

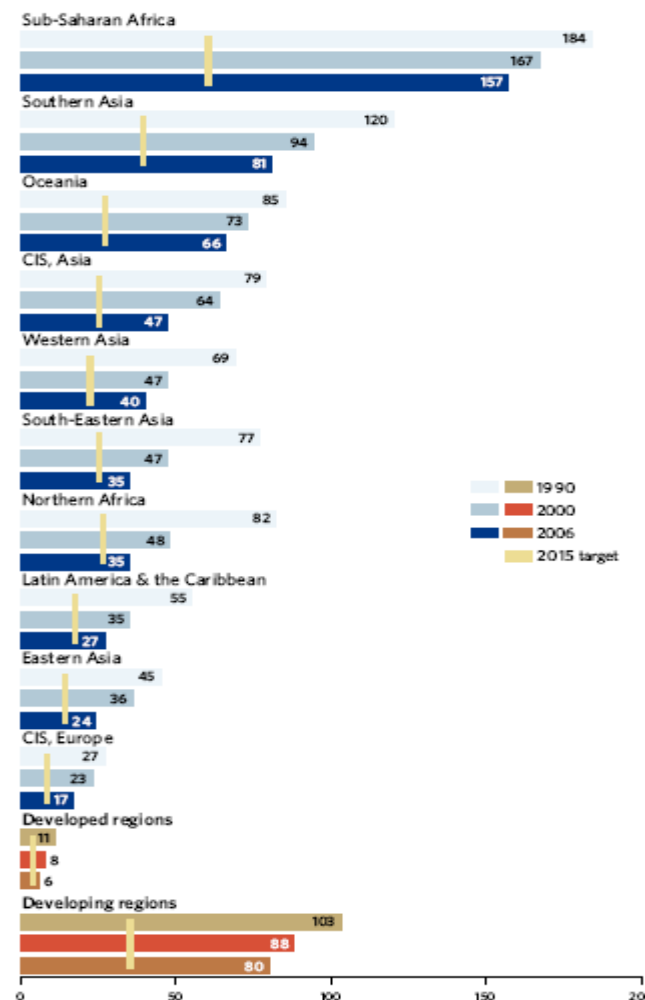
- Target 1:
Reduce by two thirds,
between 1990 and 2015, the
under-five mortality rate

GOAL 5:

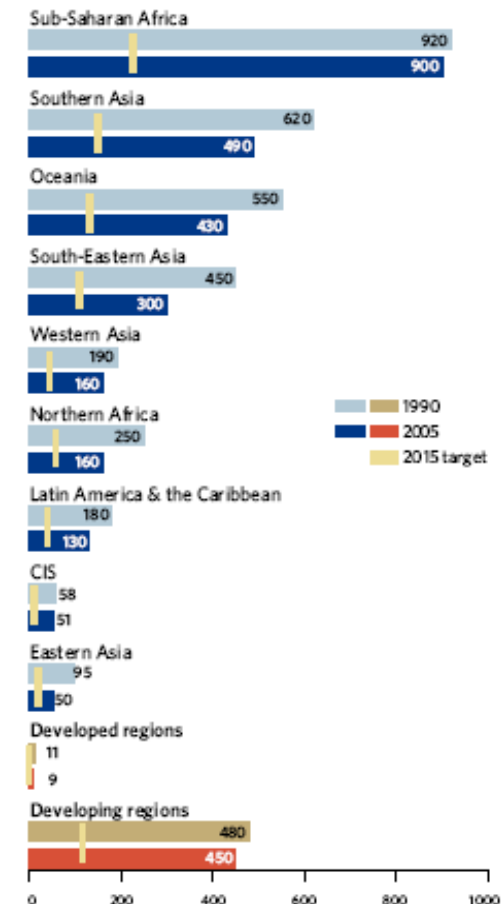
IMPROVE MATERNAL HEALTH

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

Under-five mortality rate per 1,000 live births, 1990, 2000 and 2006



Maternal deaths per 100,000 live births, 1990 and 2005



Facts

- The private sector has increased the availability of some critical essential drugs and rapidly spread mobile phone technology throughout the developing world.

4

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.
- » Every year, more than 1 million children are left motherless and vulnerable because of maternal death. Children who have lost their mothers are up to 10 times more likely to die prematurely 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)



THE MILLENNIUM DEVELOPMENT GOALS REPORT 2008

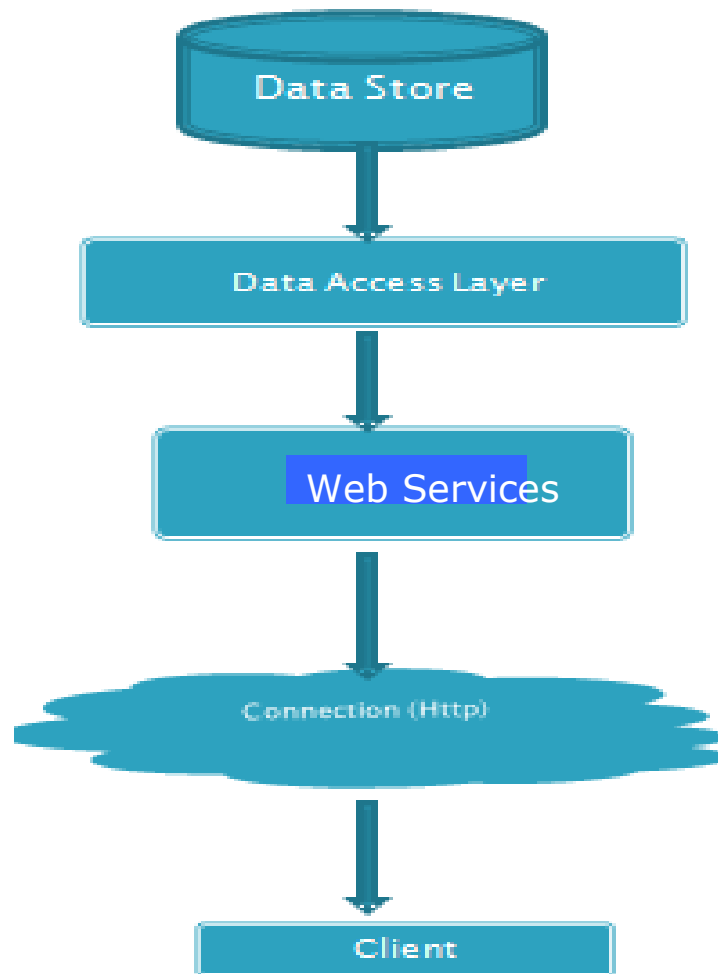
What CMC does?

- CMC stands for Care of Mom & Child in short.
- User creates profile and provide the start of pregnancy date
- CMC system will provide the diet and related symptoms info, child care info, vaccination alerts automatically on timely basis.
- Autonomous Message Service via SMS and Email notifications
- Plans to Sell the service in developed countries and can utilize it in aid for maternal health area of developing countries.

Technology Used

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

Architecture



Data Store: MS SQL database

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 webservices so that we can elaborate the idea better later also in good scale.
- Lets see what we have.

Demonstration

CMC



Future Extension

- Feedback Mechanism
- Health worker coordination with pregnant women
- Statistical Report Generation
 - child birth and mortality rate, seasonal and region based problem.
- Share physical used stuff



Summary

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

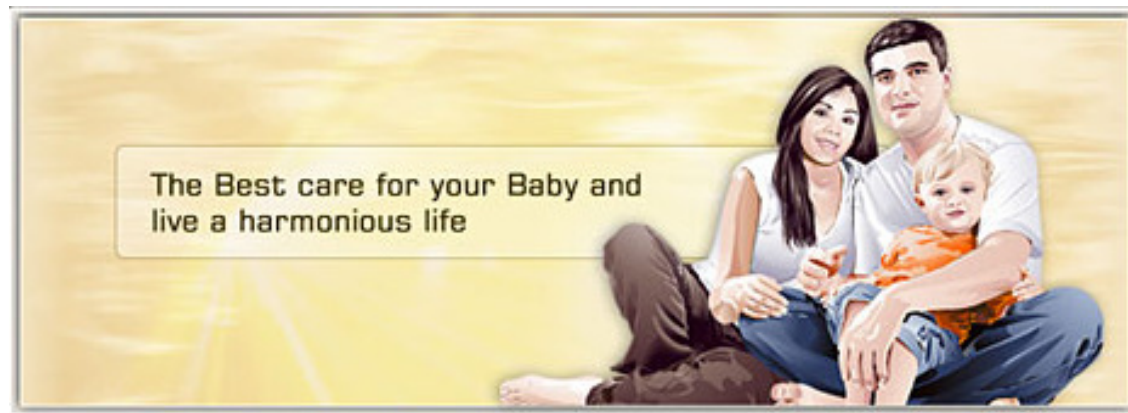


Acknowledgement

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



Thanks



CMC Team