

COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK
SCHOOL OF PROFESSIONAL STUDIES

Bibinur Zhursinbek

HAS COMPLETED THE
SUMMER PROGRAM FOR HIGH SCHOOL STUDENTS

JUNE 27 - JULY 15, 2016



Mark Blacher

A handwritten signature in blue ink, appearing to read "Mark Blacher".

ASSOCIATE DIRECTOR
ACADEMIC PROGRAMMING
SECONDARY SCHOOL PROGRAMS

John Robichaux

A handwritten signature in blue ink, appearing to read "John Robichaux".

EXECUTIVE DIRECTOR
SUMMER AND HIGH SCHOOL PROGRAMS

COLUMBIA UNIVERSITY

IN THE CITY OF NEW YORK

SCHOOL OF PROFESSIONAL STUDIES

Student: Bibinur Zhursinbek

Course: iPhone & iPad App Programming from the Ground Up

Date: June 27 – July 15, 2016

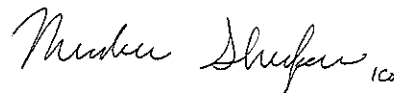
iPhone & iPad App Programming from the Ground Up is an intensive college-level, mobile device programming course that immerses students in the practice of developing applications (apps). At the beginning of the course, not a single student had ever programmed in the Objective-C language. By the end, each student had mastered the syntax of Objective-C, achieved proficiency with Apple's development tools (Xcode), and gained a thorough introduction to contemporary methods of software engineering using distributed version control (Git).

Bibinur wrote two apps over the course of the three weeks. The first app was a body mass index (BMI) calculator which is a measure of body fat based on height and weight. The app's simplicity belies the complexity of modeling a person and controlling the state of the application. Bibinur created an amazing example. She went beyond the requirements and added a basal metabolic rate (BMR) calculation to her app. BMR estimates the amount of calories that a person needs to keep the body functioning at rest calculated from a person's height, weight, sex, and age.

The second app was a voice memo app that made short audio recordings and organized each recording by date and time. Whereas the first app had a single view, this app had two distinct views. The first view was the recorder's controls and the second view was a listing of all the recordings. Bibinur worked hard to master event-driven and asynchronous programming topics. Bibinur created a great app by approaching the problem systematically and overcoming all programming challenges in an organized and creative way.

I am very proud of Bibinur's achievements. She possesses a keen intellect and great passion for computer science. The degree of skill, critical thinking, and patience taken to complete each project is substantial. I invite you to ask her to tell you about her applications so you can hear her story about how she built her very own apps.

Sincerely,

A handwritten signature in black ink, reading "Michael Shafae" with a small "10" at the end.

Michael Shafae
Instructor, iPhone and iPad App Programming from
the Ground Up