# NDSU Technology Action Plan Request

## I. Action Plan Introduction and Authorizations

### NDSU ORGANIZATION OR UNIT
Division of IT

### TITLE OF PROJECT
Blackboard Mobile

<table>
<thead>
<tr>
<th>Project Duration (3 years maximum)</th>
<th>From: July 2011</th>
<th>To: June 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Project (Check one)</td>
<td>New x</td>
<td>Previously Submitted</td>
</tr>
</tbody>
</table>

Total Technology Fee Request $53,945

<table>
<thead>
<tr>
<th>Project Director (Must be NDSU faculty or staff)</th>
<th>Campus Address:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nancy Lilleberg</td>
<td>IACC 250B</td>
</tr>
</tbody>
</table>

| Phone: 701/231-7140 | Fax: | E-mail: Nancy.Lilleberg@nsu.edu |

### Name (Type or Print) | Signature | Date
---|---|---
Project Director Nancy Lilleberg | ![Signature](signature.png) | 3/1/11
Unit Head Jean Ostrom-Blonigen | ![Signature](signature.png) | 3/1/11
IT Division Consultant Richard Frovarp | ![Signature](signature.png) | 2011-3-1

## Executive Summary (maximum of 175 words)

Blackboard Mobile is an add-on building block to the Blackboard system that allows mobile devices that are capable of 3G, 4G or wireless connections to be able to access Blackboard courses, content and organizations. The additional Mobile Central application adds the ability to access information on campus happenings, such as Bison game or Performing Arts schedules, campus and surrounding maps, and could possibly be used as a university relations tool for prospective students.

The Student Senate prompted and drafted this proposal.
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II. Project Overview

1. How does this project meet student needs?

Blackboard Mobile will give students the opportunity to access their Blackboard course materials anywhere. They will not be limited by an internet connection or if they are on or off campus. With the Mobile Central product, NDSU can also design a portal for mobile users that might include such data as Bison game or Performing Arts schedules, campus and local maps, and could possibly be used as a university relations tool for prospective students.

2. What audience does this project directly serve? What audience is indirectly served? How many students are affected?

This project directly serves the NDSU student body that has mobile devices capable of 3G, 4G or wireless connection. It will indirectly serve faculty that can then access their blackboard pages from their mobile devices. This will impact any student that has a device capable of using the service. The number of students with this capability is significant and is growing all the time.

3. For projects that target a subset of NDSU's students, please describe the possibility for broader application in the future.

According to a poll taken on the NDSU Blackboard home page, 2/3 of the NDSU students report having the technology to use the Mobile system. We anticipate that this subgroup of students will grow rapidly every year.

4. Describe both the immediate and long term impact of this project.

The immediate impact is that students will be able to access Bb course materials from their mobile devices. A potential long term impact is that Blackboard Mobile could be used to promote events on campus using the Mobile Central application.

5. Who will pay for ongoing expenses following the technology fee funded portion of this project (e.g., who will replace hardware or software after it has reached its end of life)?

After the annual license is finished, IT will study the usage statistics. If Bb Mobile is used by an adequate number of students, we would either request an additional year’s license, or would study the possibility of replacing our current Bb file storage service (Files) with Blackboard Mobile. Currently students can use their Windows Live email accounts or their Blackboard account to store files online. The Blackboard Content system (Files) is currently not used very extensively, and if the email storage spaces prove to be more convenient, we could divert funds spent on the Bb Content system to the Bb Mobile system. This would depend on current Bb licensing schedules.

6. Describe how this project will follow NDSU’s best practices in information technology. (Please make sure the NDSU IT Division staff you consulted signs in Part I of this form.)

Blackboard has become a technology focal point for students and faculty due to its wide-spread use. The majority of courses at NDSU have a corresponding Blackboard course, and many important campus
announcements are displayed on the Blackboard “Home” page. Adding Blackboard Mobile to our suite would concentrate the mobile functionality on a proved and popular campus technology.

7. What service on campus is most similar to the one proposed here? How does this project differ?

Currently, NDSU doesn't have a similar technology. IT wanted to install the free version of Bb Mobile during Fall semester, 2010, but couldn't because of security issues with the application. The free version of the application allows only Sprint subscribers to use 3G or 4G connectivity to Blackboard. Apple (iPhone and iPad) can access via the free version, but only through WiFi, thereby limited by location. Blackberry’s and Android’s don’t have any free access.

With the Bb Mobile license, Android, Blackberry, and IOS (Apple) are supported. Mobile Central supports Android, Blackberry, iOS, WebOS (Palm / HP), and Windows Mobile 7.
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III. Project Description

This project seeks to implement Bb Mobile at NDSU. This is a service offered by Blackboard that is available on mobile devices such as smart phones, Ipod touches, and Ipads. This will enable students to view there course materials from anywhere, even if they do not have an internet connection. Bb Mobile also comes with Mobile Central which could be used by many different entities on campus. Mobile Central is basically an NDSU application that will allow users to see different events on campus, maps of the campus and various other things about NDSU.

The project has many unknowns at this point, especially with the “phase 2” Mobile Central abilities. This makes it difficult to predict whether additional staffing will be required. These unknowns include:

- This project is contingent on Blackboard fixing current security issues and NDSU ECI signing off on the fix. ECI is a separate department from ITS and is responsible for the Blackboard infrastructure. There currently isn’t any estimated time for this security resolution. Tickets have been open since September about the issues.
- Usage of Mobile Learn and Mobile Central will be recorded so use and adoption of the service can be tracked. This will be helpful in determining if there is enough usage to justify continued funding.
- Any future decision on whether to drop the Blackboard Content system and transfer its funding to the Bb Mobile license would require a study on the effect of such a move and must be in correct timing with current and future Bb licenses.
- If the Mobile Central application became more demanding of staff time than what could be handled with currently funded staffing levels, IT would need to request additional funding for the “phase 2” portion of the project. Stanford was the first to implement the Bb Mobile Central functionality, so they have a very robust application of it. If NDSU were to follow suit, it would probably require additional funds for implementation staffing costs.
- If NDSU’s version of Mobile Central is called “North Dakota State University” due to the potential use by Alumni and prospective students, using the name would be dependent on University Relation’s sign off.
- Since each Mobile Central function will need to be studied, planned and implemented, IT cannot promise that even the examples given throughout this proposal will definitely be possible. Again, there are too many unknowns for IT to be held responsible for the success of any given function. Since each requires data integration, they will be dependent on what data is available, what format it is available in, and how feasible the solution is. Examples would include Bison game and Performing Art schedules, maps, and integration of Peoplesoft data.
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### IV. Milestones

List the date for each project milestone. These milestones should represent the significant accomplishments that will be associated with the action plan. For each milestone, please indicate its expected outcome and the means for assessing that outcome. (The table may be extended as needed.)

<table>
<thead>
<tr>
<th>Date</th>
<th>Milestone</th>
<th>Expected Outcomes</th>
<th>Means of Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Spring 2011</td>
<td>Receive funding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. ??</td>
<td>Security fixed</td>
<td>Ready to install</td>
<td>Approval from NDSU IT</td>
</tr>
<tr>
<td>3. ??</td>
<td>Deployed to development system</td>
<td>Test system active</td>
<td>Usable by IT staff</td>
</tr>
<tr>
<td>4. After development installation</td>
<td>Develop training and documentation material</td>
<td>Training and documentation materials on ITS Web site</td>
<td>User feedback requested</td>
</tr>
<tr>
<td>5. After development testing</td>
<td>Deployed to production system</td>
<td>Production system active</td>
<td>Test of functionality on production system</td>
</tr>
<tr>
<td>6. After production deployment</td>
<td>Announced with training and documentation made available.</td>
<td>Students / faculty / staff awareness of Bb Mobile and successful use of it</td>
<td>Usage of system, training and documentation</td>
</tr>
<tr>
<td>5. Phase 2</td>
<td>Additional Mobile Central functionality added</td>
<td>Details are unknown at this time, but may include maps, events, etc.</td>
<td>Successful implementation of each added functionality</td>
</tr>
</tbody>
</table>
Please note the results below of the opinion poll that was active on NDSU’s Blackboard “Home” page from 2/22/2011 to 2/28/2011. Throughout the days that the poll was available, the ratio remained the same with about two thirds of the participants either “very interested” or “slightly interested,” and one third voting “not interested – have device” or “not interested – no device.”

<table>
<thead>
<tr>
<th>Rating</th>
<th>Votes / Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Interested</td>
<td>750 / 51.44%</td>
</tr>
<tr>
<td>Slightly interested</td>
<td>181 / 12.41%</td>
</tr>
<tr>
<td>Neutral</td>
<td>77 / 5.28%</td>
</tr>
<tr>
<td>Not interested - have device</td>
<td>93 / 6.38%</td>
</tr>
<tr>
<td>Not interested - no device</td>
<td>357 / 24.49%</td>
</tr>
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</table>
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**VI. Budget**

Edit the dollar amounts in the “clear fields.” (click in area so that it appears “gray,” then edit) The “darkly shaded fields” can perform arithmetic. Simple use Ctrl A to “Select All” and then press function key 9, F9.

## NDSU ORGANIZATION OR UNIT

Division of IT

## PROJECT DIRECTOR(S)

(Must be NDSU faculty or staff)

Nancy Lilleberg

### A. Salaries and Wages (Number) | Number of Months | FUNDS REQUESTED
---|---|---
1. Staff ( ) | | $ 0.00
2. Graduate Students ( ) | | $ 0.00
3. Undergraduate Students ( ) | | $ 0.00

### B. Total Salary and Wages (Sum A.1., A.2., and A.3.)

$ 0.00

### C. Fringe Benefits

$ 0.00

### D. Total Salaries (Sum B and C)

$ 0.00

### E. Equipment (List each item; include installation and maintenance costs in your estimates)

1.
2.
3.
4.
5.

### F. Total Equipment (Sum items in E.)

$ 0.00

### G. Materials and Supplies (List each item)

1. Annual license for Blackboard Mobile Central | $53,620
2. Apple deployment fee | $100
3. Blackberry deployment fee | $200
4. Google deployment fee | $25
5.

### H. Total Materials and Supplies (Sum items in G)

$ 53,945

### I. Total Salaries; Equipment; Materials and Supplies (Sum: Line D + Line F + Line H)

$ 53,945

### J. Total Technology Fee Request

$ 53,945

### K. Match (Describe in Match Section)

$ 0.00

### L. Total Project Expenditure (Sum: Line J + Line K)

$ 53,945
The budgeted Blackboard Mobile Central will give all mobile users access to Blackboard and other "Central" functions that are developed. Without this license, only Sprint 3G and 4G customers can fully use this application. People with other carriers and plans would only be able to use the mobile functionality via wireless connections, thereby limiting where it can happen.
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VIII. Budget Match

ITS Instructional Services, Help Desk and Technology Learning and Media Center will support the functionality of Bb Mobile and Mobile Central through one-on-one help, training, and online documentation.