

GIMM 285: Mobile Web Services II

Spring 2022 - Updated 1-3-2022

Meeting time and place

January 10th, 2022 to April 29th, 2022 (Albertsons Library 111A)

Section 1: Tuesday at 9:00 AM to 11:45 AM

Section 2: Tuesday at 12:00 PM to 2:45 PM

Instructor

Jack Polifka (he/him)

Office Hours: Tuesdays from 7 - 8pm (Zoom), Fridays from 11am - 1pm (GIMM Lobby),
or by appointment

jackpolifka@boisestate.edu

Student Well-Being

If you are struggling for any reason (COVID, relationship, family, or life's stresses) and believe these may impact your performance in the course, I encourage you to contact me. I will provide any resources or accommodations that I can. If you notice a significant change in your mood, sleep, feelings of hopelessness or a lack of self worth, consider connecting immediately with Counseling Services (1529 Belmont Street, Norco Building) at (208) 426-1459 or email healthservices@boisestate.edu.

COVID and the Classroom

Many Boise State classes have resumed face-to-face meetings in the midst of a global pandemic and a recent local surge of infections. Our goal is to have a successful academic year while keeping our students, faculty, and local community healthy and safe. Public health requirements are in place to achieve that goal, the primary mechanism for which includes the mandatory use of facial coverings that protect all of us.

We have taken health precautions on campus so that you can have the option of a face-to-face course. However, there is still inherent risk associated with face-to-face courses during a pandemic because of proximity to others and length of potential exposure to the virus. Therefore, as members of this learning community, it is imperative that we all engage in behaviors that protect the overall public health.

You have enrolled in a face-to-face course, and this format offers a number of benefits that appeal to many students. In order to preserve your access to this face-to-face option you are required to

- 1) sit in the same seat all semester (for purposes of contact tracing) and
- 2) wear facial coverings in all face-to-face learning environments. You must keep your mouth and nose covered at all times throughout class — facial coverings cannot be pulled up or down. **As a health precaution, eating and drinking are NOT permitted in the classroom.**

By enrolling in an in-person course, you agree to comply with Boise State's rules and precautions which include, but are not limited to, facial coverings, frequent hand washing, hand sanitizing, and sitting in the same seat all semester. Failing to comply with these rules and precautions is a violation of Boise State's [Student Code of Conduct](#) and will subject you to university sanctions and discipline.

University policy states that I am not allowed to begin/continue with instruction unless and until everyone present has a facial covering in place.

This course is designed to be accessible to all students. A very small percentage of people cannot wear facial coverings for reasons related to medical conditions or disabilities. If this is your experience, please contact the [Educational Access Center](#) to document your condition so that we may determine the best accommodation for you. Until an accommodation is in place, you will need to participate remotely. If you need to read lips or facial expressions to understand what people are saying, please let the [Educational Access Center](#) and me know via email.

If you are unwilling to wear a facial covering, you cannot participate in person. If this is the case, please dismiss yourself and either inquire whether you may participate in the class fully remotely, or contact the [Registrar's Office](#) (208-426-4249) to pursue your learning experience in a different remote or online section. Should you refuse to cover your mouth and nose and also refuse to leave the classroom, I have been directed to dismiss the class and you will be reported to and contacted by the Dean of Students Office.

Mutual Guidelines for Safe Learning Environments

While these public health measures are essential to protecting our individual and communal health, they also complicate how we engage in teaching and learning. The following guidelines should ease our comfort and communication with one another:

- In the classroom, we must wear a facial covering that covers our mouth and nose at all times. If you or I let our facial coverings slip, we will politely remind one another to secure our masks.
- Facial coverings muffle voices. I will use the classroom microphone to amplify my voice through my mask. In addition, I will repeat your questions and summarize comments to ensure we all can follow any discussion.

Welcome

This course will focus on using web technologies to develop web services to effectively manage large datasets by collecting information from users and storing that information in long-term storage systems in the context of mobile websites that can be accessed through an internet browser. We will extend our knowledge of HTML, CSS, Javascript, Node.js, and MySQL by using advanced development techniques with them. There will be opportunities to use these techniques individually and collaboratively.

Course learning outcomes

After successful completion of this course, students will be able to...

1. Design mobile website interfaces for collecting and displaying large volumes of data
2. Demonstrate how to use a long-term data storage system to address a computing problem
3. Develop a web application programming interface (API) to connect mobile interfaces and long-term data storage systems
4. As a member of a team, produce an API that solves an ill-defined problem

Course format

This course will use lectures, in-class activities, and programming work. In-class activities will generally need to be handed-in at the end of the class period.

Programming work will generally be introduced before the end of the class period and

reviewed during the next week. Most programming assignments will require 1 - 3 hours to complete.

Required materials

There are no required reading materials for this course.

All software needed for the course will be free for download. Additional software may be needed during the course and will be announced when needed. What is needed for this course includes the following:

- Integrated development environments (IDE)
 - Recommended for programming: [Visual Studio Code](#)
 - Recommended for MySQL: [MySQL Workbench](#)

Grading

In-class Assignments	25%
Programming Assignments	20%
Mobile Data Dashboard	15%
CRUD API Mobile Website	20%
Final Group Project	25%

Assessments

The main assessments for this course will be a mobile data dashboard, CRUD API mobile website, and final group website.

Late work policy

All assignments minus the final will be accepted until 11:59pm of the Saturday before finals week. Assignments handed in late may not receive feedback beyond a grade. If illness, death in your family, or another emergency prevents you from completing an assignment on time, please email me.

This class's community is inclusive

This course is developed to provide a welcoming environment and effective, equitable learning experience for all students. If you encounter barriers in this course, please bring them to my attention so that I may address them.

This class's community is inclusive.

Students in this class represent a rich variety of backgrounds and perspectives. The College of Innovation and Design is committed to providing an atmosphere for learning that respects diversity and creates inclusive environments in our courses. While working together to build this community, we ask all members to:

- share their unique experiences, values, and beliefs.
- listen deeply to one another.
- honor the uniqueness of their peers.
- appreciate the opportunity we have to learn from each other in this community.
- use this opportunity together to discuss ways in which we can create an inclusive environment in this course and across the campus community.
- recognize opportunities to invite a community member to exhibit more inclusive, equitable speech or behavior—and then also invite them into further conversation. We also expect community members to respond with gratitude and to take a moment of reflection when they receive such an invitation, rather than react immediately from defensiveness.
- keep confidential any discussions that the community has of a personal (or professional) nature, unless the speaker has given explicit permission to share what they have said.
- respect the right of students to be addressed and referred to by the names and pronouns that correspond to their gender identities, including the use of non-binary pronouns.

We use each other's preferred names and pronouns.

Please let me know of your preferred or adopted name and gender pronoun(s), and I will make those changes to my own records and address you that way in all cases.

To change to a preferred name so that it displays on all BSU sites, including Canvas, contact the Registrar's Office at (208) 426-4249. Note that your legal name will still appear on BSU official and legal documents, as only a legal name change can alter your name in those contexts.

This course is accessible to students with disabilities.

I recognize that navigating your education and life is often more difficult if you have disabilities. I want you to achieve at your highest capacity in this class. If you have a disability, I need to know if you encounter inequitable opportunities in my course related to:

- accessing and understanding course materials
- engaging with course materials and other students in the course
- demonstrating your skills and knowledge on assignments and exams.

If you have a documented disability, you may be eligible for accommodations in all of your courses. To learn more, make an appointment with the university's [Educational Access Center](#).

For students responsible for children

I recognize the unique challenges that can arise for students who are also parents. Any student needing to temporarily bring children or another dependent to class is welcome to do so to stay engaged with the class.

Academic integrity

To create a welcoming, engaging, and effective learning environment, I expect all of us to exhibit behavior that reflects Boise State's [Statement of Shared Values](#). The Shared Values emphasize academic excellence, caring, citizenship, fairness, respect, responsibility, and trustworthiness. In keeping with these values, I expect students in this course to uphold the standards outlined in the Boise State University [Student Code of Conduct](#).

University resources

If you feel your studies are being compromised because of a lack of food, shelter, or other basic needs, know that the university has resources that may be able to help. You can talk to me and I can work to connect you with the right resources. Or you can contact the Dean of Students office and ask for help - deanofstudents@boisestate.edu.

The university has many resources designed to support you as a learner and human being. Among these are:

- [Albertsons Library](#) provides a treasure trove of physical and electronic resources.
 - As you enter the library, straight ahead you'll find the Reference Desk, where librarians can help you find the information and resources you need.
 - The Circulation Desk lets students borrow various technologies.
 - The MakerLab on the second floor offers tools for student use, and there are friendly staff in the MakerLab to help you learn how.
- [The Writing Center](#) offers individual consultations tailored to your needs, including making sense of writing assignment instructions, brainstorming, crafting a thesis, organizing an essay, revisions, citations, and more.
- [Counseling Services](#) helps you tap into your strengths and find resources to deal more effectively with concerns that impact your pursuit of personal and academic goals. It emphasizes prevention and early detection and provides a broad spectrum of short-term counseling, consultative, evaluative, teaching, and training functions. Counseling staff consists of licensed counselors, psychologists, and closely supervised trainees/post-graduate interns.
- [The Gender Equity Center](#) provides specialized, brief, no-cost, confidential support for campus members affected by:
 - Identity-related harassment
 - Sexual harassment, sexual assault, unhealthy relationships, and stalking
 - Life experiences related to gender, sexual orientation, and allyship
 - Life transitions and crisis
 - Personal, financial, or academic roadblocks
- [Multicultural Student Services](#) works with all students interested in equity and social justice, students from different cultures, countries and ethnicities. The staff understands cultural differences and perspectives, and knows what it's like living in a dominant culture. The training and the programs Multicultural Student Services provides can help you navigate through political correctness and into respectful dialogue. This center also provides:
 - Support and guidance for planning cultural festivals and events
 - In-center tutoring and studying lounge
 - Volunteer opportunities
 - Mentoring and Training
 - Programs and events
- Food assistance: If you are hungry and cannot afford to purchase food, the campus has some resources to help you. You can visit the [campus food pantry](#) or [get free meals in the campus dining hall](#).
- The Boise State [Student Basic Needs Collaborative](#) can connect you with other resources you need to survive and thrive.

Tentative course schedule

	Date	Topics	In-class Activity (ICA)	Programming Assignment (PA)
1	January 11	Introduction / HTML	ICA 1: Forms	PA 1: Forms
2	January 18	HTML / Node.js	ICA 2: Form Validation	PA 2: Form Validation
3	January 25	HTML / Node.js	ICA 3: CRUD Application	PA 3: CRUD Application
4	February 1	Introduce CRUD API Mobile Website	ICA 4: Brainstorming for CRUD API Mobile Website	Mobile Data Dashboard
5	February 8	MySQL / Node.js	ICA 5: SELECT Statements (INNER JOIN & LIMIT)	PA 4: SELECT Statements (INNER JOIN & LIMIT)
6	February 15	MySQL / Node.js	ICA 6: INSERT Statements	PA 5: INSERT Statements
7	February 22	MySQL / Node.js	ICA 7: UPDATE Statements	PA 6: UPDATE Statements
8	March 1	MySQL / Node.js	ICA 8: DELETE Statements	PA 7: DELETE Statements
9	March 8	Node.js	ICA 9: Model-View-Controller & GET API Requests	PA 8: Model-View-Controller & GET API Requests
10	March 15	Node.js	ICA 10: POST / PUT / DELETE API Requests	PA 9: POST / PUT / DELETE API Requests
	March 22	<i>Spring Break - No Class</i>		
11	March 29	MySQL / Node.js	ICA 11: User authentication	PA 10: User authentication
12	April 5	Final Group Project	Start Final Group Project	CRUD API Mobile Website
13	April 12	Final Group Project	ICA 12: Final Project Progress Meeting	
14	April 19	Final Group Project	ICA 13: Final Project Progress Meeting	
15	April 26	Final Group Project	ICA 14: Final Project Progress Meeting	
16	May 3	Final Group Project	Present Final Group Project	