# PROG 2500 Windows PRogramming – Final Project

# UWP Applications

Assignment Value: **30% of overall course mark**.

Due Dates: **Project Proposal - Friday, April 5th**

**Project Demonstration, Team Journal and Peer Evaluation – Tuesday, April 23rd**

#### Assignment Instructions:

As a team, propose, document and code a UWP application as described by the requirements of this assignment (see below).

This is a group project, each group should have 3 to 4 members. You may choose your own group, but the instructor has final say in group membership and may shuffle the teams at any time. If the group cannot decide on an application, the instructor will assign one. You want to avoid this. >=)

As this assignment is built around team collaboration, it is recommended that you use as many team collaboration tools as you can. I.e. host the project in github (private accounts available if not already provided) or Visual Studio Team Services, shared documents and demonstrate collaboration through assigning work items or tickets and show different branches for work.

#### Submission Instructions:

**Proposal:** One submission for the group, uploaded to the “Proposal” group dropbox.

**Team Journal:** Each student will keep a log of their own work. For the final Team Journal submission, all members’ logs should be combined in a single file, along with the other group journal requirements, then uploaded as a single submission to the “Journal” group dropbox. **Note:** Logs will be marked as a group, not individually.

**Project Solution (Application Code):** Add all final project files & resources to a .ZIP folder and submit a single submission for the group to the “Presentation” group dropbox.

**Note:** It is also recommended that each student push a copy of the final project to their own Git repositories, to retain a copy for their own code portfolio.

**Peer & Self Evaluations:** Each group member will download the provided member evaluation rubrics (.XLS file) complete evaluations for themselves and all other team members, then upload the completed evaluations file to the “Peer Evaluations” group dropbox.

**Note:** Team members who do not upload a peer/self evaluation file will receive a zero (0) for themselves and all other team members will receive full marks from the non-participating student.

#### Evaluation:

To insure the greatest chance of success on this assignment, be sure to check the marking rubrics at the end of this document or in Brightspace. The rubrics contain the criteria your instructor will be assessing when marking your assignment.

## Program Requirements

As a group, build a UWP application that:

* Consumes data asynchronously from a data source (web service)
  + See the following link for a source of web services <https://www.programmableweb.com/category/all/apis>
* Lists a summary of data with a separate details section for selected data.
* Demonstrates proper use of main UWP course concepts, including databinding, command binding, user controls/custom dialogs.
* Allows for filtering of data (i.e. by date, text, location, etc.).
* Has at least three application Pages (ex. a details screen, an About page listing team members, etc.)
* Uses a complex control to display information (i.e. images, web pages or multimedia)

Project Deliverables

* Project Proposal (5% of Final Mark):
  + Project description
  + Wireframe of application
  + Workplan, including timeline and member assignments
* Team Collaboration and Progress Journal (5% of Final Mark)
  + Work Progress Logs (Kept by individual students, combined for submission)
  + Team Resources/Links documentation
  + Project commentary/documentation
* Application Evaluation & In-Class Demonstration (15% of Final Mark)
* Peer & Self Evaluations (5% of Final Mark)

Please review the four rubrics below for evaluation expectations for each deliverable.

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| **Project Proposal** | | |  | |  |  |
| This will be a document that outlines the proposed application the team will work on. It should come with a workplan (task breakdown and member assignments, and a wireframe for the proposed application. This document should be well-written and professional. | | | | | | |
| **Criteria** | **Insufficient (0 pts)** | **Needs Improv (1-2 pts)** | | **Sufficient (3-4 pts)** | **Excellent (5 pts)** | |
| **Proposal** | Proposal missing entirely, or it contains too many issues and/or omissions. Application idea from instructor. | An effort was made, but proposal has multiple issues or omissions. Application idea is commonplace. | | A good effort, but proposal has a few issues and/or areas for improvement. Application idea is somewhat derivative. | Proposal describes and outlines the application well. Proposal clearly demonstrates a strong effort of research, planning and design. Project idea is unique. | |
| **Workplan**  **(x2)** | Workplan, timeframes, or assignments missing entirely, or contain too many issues and/or omissions. (0-3 pts) | An effort was made, but workplan has multiple issues or omissions. (4-6 pts) | | A good effort, but workplan has a few issues and/or areas for improvement.  (7-9 pts) | Concise and reasonable workplan, containing a detailed description of expected outcomes, timeframes, team work assignments and how each project requirement will be met. (10 pts) | |
| **Wireframe** | Wireframes missing entirely, or contain too many issues and/or omissions. | An effort was made, but wireframe has multiple issues or omissions. | | A good effort, but wireframe has a few issues and/or areas for improvement. | Neat and clear wireframes. Application screens are well thought out and designed. Wireframes cover all proposed screens of the application. | |
| **Polish / Professionalism**  **(x0.5)** | Too many issues. Complete revision needed. (0 pts) | | | A good effort, but has a few issues and/or areas for improvement. Needs revision and/or proofreading. (1.5 pts) | Grammar, spelling and document layout are to a professional level. (2.5 pts) | |
| **Time Management**  **(x0.5)** | More than 1 day late (0 pts) | | | 1 day late (1.5 pts) | On time (2.5 pts) | |
|  |  |  | | **Total:** | **/25** | |
| **Team Collaboration and Progress Journal** | | |  | |  |  |
| This is a document of the group’s work progress logs, project comments, external resource info/links, links to github, commit messages, etc. Think of it as a record of how the team functions and where all the team’s resources/info can be found. In the real world, this type of journal is invaluable to getting new team members up to speed**. Note: Work Logs should be kept individually per group member, then combined for final submission.** | | | | | | |
| **Criteria** | **Insufficient (0 pts)** | **Needs Improv (1-2 pts)** | | **Sufficient (3-4 pts)** | **Excellent (5 pts)** | |
| **Work Progress Logs (x2)** | Not done, or contains too many issues and/or omissions. | An effort was made, but there were multiple issues or omissions. | | A good effort, but has a few issues and/or areas for improvement. | Logs comprehensively document the team’s progress, issues encountered, solutions found, etc. | |
| **Team Resources Info/Links** | Not done, or contains too many issues and/or omissions. | An effort was made, but there were multiple issues or omissions. | | A good effort, but has a few issues and/or areas for improvement. | Journal contains a comprehensive list of all resources, links, configurations, credentials, etc. required to be a functioning member of the team project. | |
| **Commentary/ Documentation** | Not done, or contains too many issues and/or omissions. | An effort was made, but there were multiple issues or omissions. | | A good effort, but has a few issues and/or areas for improvement. | Journal (and project) includes clear and extensive organizational and logical commentary, such as code comments, commit messages, etc. | |
| **Professionalism**  **(x0.5)** | Too many issues. Complete revision needed. (0 pts) | | | A good effort, but has a few issues and/or areas for improvement. Needs revision and/or proofreading. (1.5 pts) | Grammar, spelling and document layout are to a professional level. (2.5 pts) | |
| **Time Management**  **(x0.5)** | More than 1 day late (0 pts) | | | 1 day late (1.5 pts) | On time (2.5 pts) | |
|  |  |  | | **Total:** | **/25** | |
| **Application Evaluation & Demonstration** | | |  | |  |  |
| The final demonstration of the application to the class. All members should be present and participate in the demonstration. This should include an overview of the Application and the Team Collaboration Journal. Be prepared to answer questions about the application and the progress of the project. | | | | | | |
| **Criteria** | **Insufficient (0 pts)** | **Needs Improv (1-2 pts)** | | **Sufficient (3-4 pts)** | **Excellent (5 pts)** | |
| **Functionality of Application** | Not done, or contains too many issues and/or omissions. | An effort was made, but there were multiple issues or omissions. | | A good effort, but there were a few issues and/or areas for improvement. | Application as demonstrated is complete, bug-free, user-friendly and “market ready”. | |
| **Asynchronous Data Usage** | Not done, or contains too many issues and/or omissions. | An effort was made, but there were multiple issues or omissions. | | A good effort, but there were a few issues and/or areas for improvement. | App consumes data asynchronously from an external data source. Implementation works as expected without errors. | |
| **App Layout – Summary/Detail** | Not done, or contains too many issues and/or omissions. | An effort was made, but there were multiple issues or omissions. | | A good effort, but there were a few issues and/or areas for improvement. | App uses a summary view/selected details layout. Works as expected with no errors. | |
| **Data Filtering** | Not done, or contains too many issues and/or omissions. | An effort was made, but there were multiple issues or omissions. | | A good effort, but there were a few issues and/or areas for improvement. | App properly implements a data filtering mechanism as expected, with no errors. | |
| **Multiple Pages** | Not done, or contains too many issues and/or omissions. | An effort was made, but there were multiple issues or omissions. | | A good effort, but there were a few issues and/or areas for improvement. | App contains a minimum of three separate pages. Navigation/page interaction works as expected with no errors. | |
| **Complex Control Usage** | Not done, or contains too many issues and/or omissions. | An effort was made, but there were multiple issues or omissions. | | A good effort, but there were a few issues and/or areas for improvement. | App uses at least one complex control in a meaningful way, as expected with no errors | |
| **Software/Code Best Practices** | Not done, or contains too many issues and/or omissions. | An effort was made, but there were multiple issues or omissions. | | A good effort, but there were a few issues and/or areas for improvement. | Application is well-architected, efficient and strongly implements best practices as outlined in the course. Databinding, command usage, layout management, code commenting, resource management, etc. | |
| **Demonstration** | Not done, or contains too many issues and/or omissions. | An effort was made, but there were multiple issues or omissions. | | A good effort, but there were a few issues and/or areas for improvement. | Demonstration of application and journal is well-prepared, runs smoothly, is interesting and professional. | |
| **Questions** | Not done, or contains too many issues and/or omissions. | An effort was made, but there were multiple issues or omissions. | | A good effort, but there were a few issues and/or areas for improvement. | All questions are answered well and by all team members. | |
| **Team Participation** | Not done, or contains too many issues and/or omissions. | An effort was made, but there were multiple issues or omissions. | | A good effort, but there were a few issues and/or areas for improvement. | All team members participate in the demo in a meaningful way. Demo was not dominated by a single member. | |
|  |  |  | | **Total:** | **/50** | |

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| **Peer & Self Evaluations** | | |  | |  |  |
| Peer evaluation for each team member. Include an evaluation for yourself.  **Note**: Team members who do not upload a peer/self evaluation file will receive a zero (0) for themselves and all other team members will receive full marks from the non-participating student. | | | | | | |
| **Criteria** | **Insufficient (0 pts)** | **Needs Improv (1-2 pts)** | | **Sufficient (3-4 pts)** | **Excellent (5 pts)** | |
| **Planning & Discussions** | Participated few or no group discussions. | Participated in some group discussions. | | Participated in most group discussions. | Participated fully, in a meaningful way, in all group discussions. | |
| **Contribution** | Made little or no contribution to the group project work. | Contributed to the group project work, but significantly less (or more) than the group average. | | Contributed to the group project work, but somewhat less (or more) than the group average. | Contributed equally to the group project work. IE. Carried his/her weight. | |
| **Quality of Effort** | Completed few or no tasks with good effort, or produced poor quality work. | Completed some tasks with good effort, but needs significant improvement. | | Completed most tasks with good effort, but has room for some improvement. | Completed all assigned tasks to the best of their ability. | |
| **Attendance / Punctuality** | Missed all/most meetings and/or assignment deadlines. Made no effort to make alternative arrangements. | Missed or was significantly late for multiple meetings or assignment deadlines. Did not notify group or make alternative arrangements. | | Attended most meetings/met most deadlines, but missed or was significantly late for at least one, or did not attempt to make alternative arrangements. | Attended all meetings (in-class or otherwise) in a timely manner, and met all assigned deadlines. If unavailable, made a reasonable effort to make alternative arrangements. | |
| **Professionalism** | Rarely or never acted respectfully and professionally. Contributions were always incomplete or unpolished. | Sometimes acted respectfully and professionally, but has significant room for improvement. Contributions were often incomplete or unpolished. | | Acted respectfully and professionally most of the time, but could improve. Most contributions were complete and polished, but some were not. | Acted respectfully and professionally throughout the project. All contributions were complete and polished. | |
|  |  |  | | **Total:** | **/25** | |