Grading Rubric for Project 2:

Agile Computing Methodology (10%)

Product Backlog set and maintained	_____ / 5
Sprint Backlogs set and maintained	_____ / 5
Backlogs sufficiently granular (reasonable units of work for tasks	_____ / 5
SCRUM meetings scheduled and attended	_____ / 5
Burndown charts useful for monitoring progress	_____ / 5
Retrospective Reports provide insight into process	_____ / 5

Meeting Sprint Backlog Goals (10%)

Sprint 1 Backlog Goals met	_____ / 8
Sprint 2 Backlog Goals met	_____ / 10
Sprint 3 Backlog Goals met	_____ / 12

Completeness/Quality of Game Manager and Interface (30%)

Game manager in place to manage games for players and AI	_____ / 5
Checks for winner and tie outcomes	_____ / 5
Check for tie outcome (turn limit	_____ / 5
Ability to handle arbitrary board sizes	_____ / 5
Checks to ensure moves are valid	_____ / 7
Capable of handling advances/withdrawals	_____ / 6
Capable of handling paika moves only if allowed	_____ / 6
Capable of handling sacrifice moves	_____ / 6
Time verification ability (check for overtime and cause loss)	_____ / 5
Client-server: server side working	_____ / 8
Client-server: client side working	_____ / 7
User interface to manage game options	_____ / 5
User interface to allow users to see current board status	_____ / 5
User interface to allow users to select all moves	_____ / 5
Evaluation of overall user interface quality	_____ / 10

(ease of use, completeness, etc.) – subjective score should evaluate allowing people to set parameters for program easily and straightforwardly, easily make moves, set up client/server game, etc.

*** NOTE: 4-person teams should be held to a MUCH higher standard, here

Completeness/Quality of AI (30%)

Basic AI in place (AI can make a valid move)	_____ / 5
AI can enumerate all valid moves	_____ / 10
Some lookahead feature is in place (i.e. evaluating the possible moves)	_____ / 10
Minimax tree implemented beyond second level (2+ move lookahead)	_____ / 15
Time limits checked	_____ / 5
Iterative Deepening or other approach used to make use of time	_____ / 10

(i.e. adapts search to do better job if more time available)

Most basic board evaluation function exists (identify wins/losses)	_____ / 5
Basic board evaluation function exists (count pieces)	_____ / 5
Improvements to Minimax tree and/or board function evaluation:	_____ / 25

Suggested options (full credit only if they made *significant* improvement over base; one or two of these probably not enough for full credit): Alpha/beta pruning implemented. Alpha/beta

pruning over whole tree, not just one level. Ordering of moves to make pruning more efficient. Beam searching or similar approach to limit breadth/gain depth.
Evaluation/weighting/analysis of board position in evaluation function.
*** NOTE: 4-person teams should be held to a MUCH higher standard, here

Additional Features Added on (10%)

Additional features added to system _____ / 30

Subjective evaluation: teams must have implemented specific improvements to the AI (tree and/or board evaluation), interface, gameplay, etc. that are beyond what was suggested. Examples might include multithreading for search, new options for game mechanics, "booked" opening and/or closing sequences, cached data for faster future evaluation, help systems, animations of moves, better graphics, etc. "Basic" improvements to search such as pruning and ordering of moves should be included in the earlier score.
*** NOTE: 4-person teams should be held to a MUCH higher standard, here

Code style: naming/layout/commenting (10%)

Good modularity of code/choice of classes/etc. _____ / 6
Good choices for variable/function/class/etc. naming _____ / 6
Comments are appropriate and used throughout code _____ / 6
Layout of code is conducive to following program flow _____ / 6
Consistent style throughout application _____ / 6

TOTAL: _____ / 300

Scrum Master Grades (grade on quality and completeness of reports, not actual accomplishments)

Scheduling and holding scrum meetings as required _____ / 10
Product backlogs maintained consistently throughout _____ / 15
Product burndown maintained consistently throughout _____ / 15
Sprint 1 backlog and burndown charts well maintained/presented _____ / 15
Sprint 1 retrospective well-written and descriptive _____ / 5
Sprint 2 backlog and burndown charts well maintained/presented _____ / 15
Sprint 2 retrospective well-written and descriptive _____ / 5
Sprint 3 backlog and burndown charts well maintained/presented _____ / 15
Sprint 3 retrospective well-written and descriptive _____ / 5

TOTAL: _____ / 100

Notes: