Using first-principles calculations and random phase approximation analysis, the electronic structure and magnetism in the kagome superconductor $CsCr_3Sb_5$ is investigated. We identify a 4×2 altermagnetic spin-density-wave ground state coupled with lattice distortion at ambient pressure, with multiple competing SDW phases, suggesting strong magnetic frustrations. At higher pressures, the competing orders become nearly degenerate and structural modulations are suppressed. Strong antiferromagnetic spin fluctuation is observed, which mediates two competing $s\pm$ and (d_{xy}, $d_{x^2-y^2}$) – wave superconducting orders. The unoccupied incipient flat bands, which enable a sublattice-momentum coupling selective enhancement of AF fluctuation, are shown to be crucial for the antiferromagnetic fluctuation. Our results strongly support unconventional superconductivity in $CsCr_3Sb_5$ above 5GPa, and suggests the crucial role of magnetic fluctuation as well as the kagome symmetry in this system.