We have discovered a doubly eclipsing, bound, quadruple star system in the field of K2 Campaign 7. EPIC 219217635 is a stellar image with $K_p = 12.7$ that contains an eclipsing binary (‘EB’) with $P_A = 3.59470$ d and a second EB with $P_B = 0.61825$ d. We have obtained followup radial-velocity (‘RV’) spectroscopy observations, adaptive optics imaging, as well as ground-based photometric observations. From our analysis of all the observations, we derive good estimates for a number of the system parameters. We conclude that (1) both binaries are bound in a quadruple star system; (2) a linear trend to the RV curve of binary A is found over a 2-year interval, corresponding to an acceleration, $\dot{V} = 0.0024\pm0.0007$ cm s$^{-2}$; (3) small irregular variations are seen in the eclipse-timing variations (‘ETVs’) detected over the same interval; (4) the orbital separation of the quadruple system is probably in the range of 8-25 AU; and (5) the orbital planes of the two binaries must be inclined with respect to each other by at least 25°. In addition, we find that binary B is evolved, and the cooler and currently less massive star has transferred much of its envelope to the currently more massive star. We have also demonstrated that the system is sufficiently bright that the eclipses can be followed using small ground-based telescopes, and that this system may be profitably studied over the next decade when the outer orbit of the quadruple is expected to manifest itself in the ETV and/or RV curves.